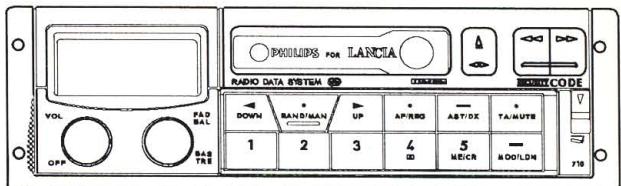


Service  
Service  
Service



For repair information of the Cassette deck see Service Manual N° 4822.725.24071 of Auto Cassette Deck P6-25/2

# Service Manual

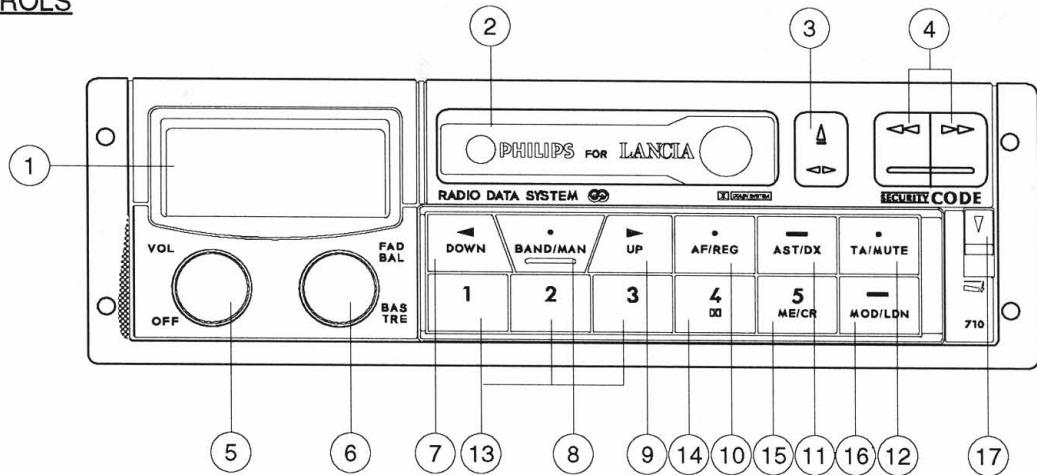
12 V

## Contents

	page
Controls and connections	-2
Technical data - Chips handling	-3
Security code	-4
Block diagram	-5-5a
Main panel PCB layout	-6-6a-19-19a
RFD schematic diagram	-7-7a
CTR schematic diagram	-8-8a
Checks and adjustments / DC voltages	-9-9a
APS module schematic diagram	-10-10a
APS module PCB layout	-11
RDS module PCB layout	-12
RDS module schematic diagram	-13-13a
Deck module schematic diagram	-14-14a
Deck module PCB layout	-15-15a
Det-unit PCB layout and schematic diagram	-15-15a
FHD schematic diagram	-16-16a
LCD schematic diagram	-17-17a
SPM schematic diagram	-18-18a
Exploded view / Mechanical partslist	-20-20a
Electrical partslist	-21-21a-22-22a-23
Technician's remarks	-23

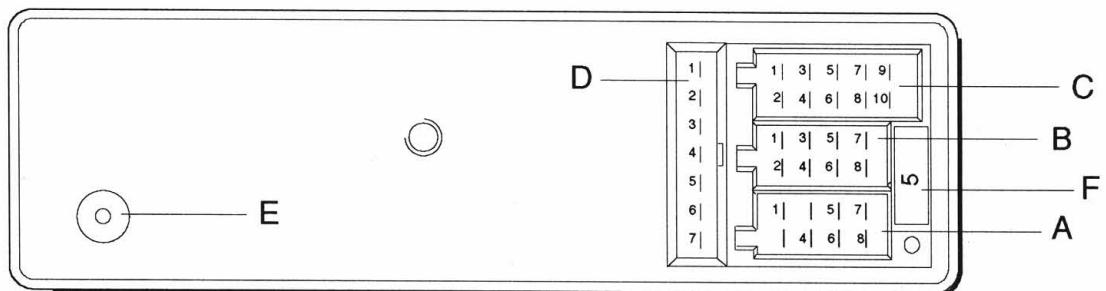


## CONTROLS



- |                                     |   |
|-------------------------------------|---|
| (1) Display                         | (10) Select RDS / Select Regional       |
| (2) Cassette Opening                | (11) Autostore /Select Distance Mode    |
| (3) Eject / Reverse Button          | (12) Select info /Select Audio Mute     |
| (4) FRW / FFW Buttons               | (13) Preset 1 to 3                      |
| (5) ON/OFF / Volume                 | (14) Preset 4 / Dolby                   |
| (6) Bass / Treble / Fader / Balance | (15) Preset 5 / Metal - Chrome          |
| (7) Search Down                     | (16) Select Mode (Radio -Tape) Loudness |
| (8) Wave Range / Manual Mode        | (17) Release Knob for Detachable Unit   |
| (9) Search Up                       |   |

## CONNECTIONS



A: POWER SUPPLY	B: LOUDSPEAKERS	C: NOT CONNECTED	D: NOT CONNECTED
A1 : Not connected A2 : Remote Control Ground A3 : Remote Control Input A4 : Permanent Plus A5 : Switched Plus Aerial A6 : Dashboard Illumination A7 : Permanent Plus A8 : Ground	B1 Rear Right B2 Rear Right Ground B3 Front Right B4 Front Right Ground B5 Front Left B6 Front Left Ground B7 Rear Left B8 Rear Left Ground		
E: AERIAL PLUG			
F: FUSE : 5A			

22DC710/26

## TECHNICAL DATA

### GENERAL

Power supply : 14.4V DC  
Dimensions : 180x150x51 mm

### RADIO

LW : 144-288 KHz  
MW : 531-1611 KHz  
FM : 87.5-108 MHz  
IF-AM : 10.7 MHz  
IF-FM : 10.7 MHz  
Sensitivity 26dB S/N : 40 µV (LW)  
: 30 µV (MW)  
: 3 µV (FM)  
Limitation α-3dB : 8 to 25 µV

### CASSETTE

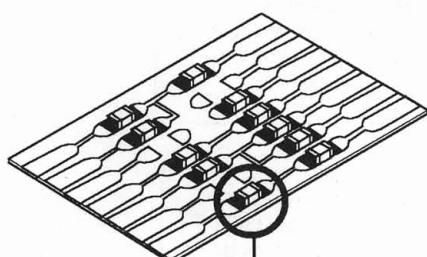
Cassette mechanism : P6-25/2  
Number of tracks : 2x2  
Tape speed : 4.76 cm/sec  
Wow and flutter : ≤ 0.35%  
Crosstalk : ≥ 30dB

### AMPLIFIER

Output power : 4x5W / 4Ω (D = 10%)  
Treble control : +10/-10 ± 2dB at 10kHz  
Bass control : +14/-13 ± 2dB at 60Hz  
Balance control : -28dB  
Fader : -28dB  
Mute : -70dB

## HANDLING CHIP COMPONENTS

### GENERAL

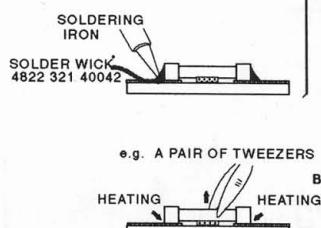
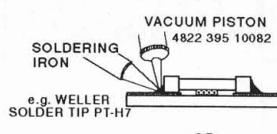


CHIP  
COMPONENT  
SOLDER  
COPPER TRACK  
P.C.B.  
GLUE



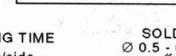
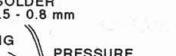
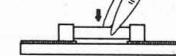
SERVICE PACKAGE

### DISMOUNTING

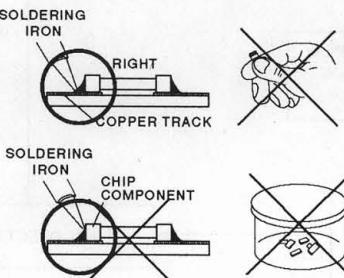


### MOUNTING

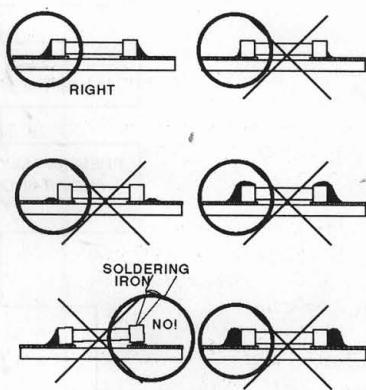
e.g. A PAIR OF TWEEZERS



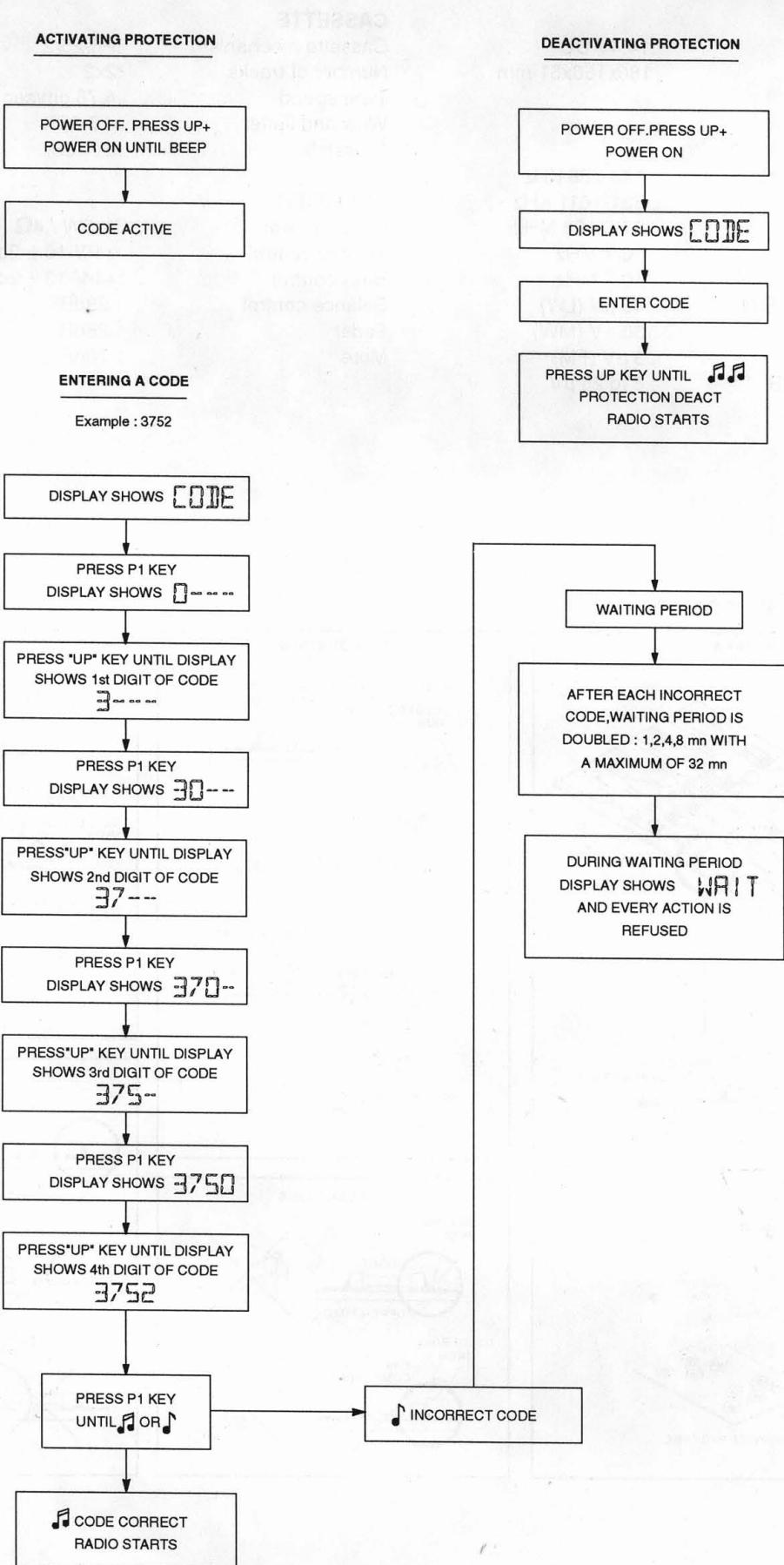
### PRECAUTIONS



### EXAMPLES

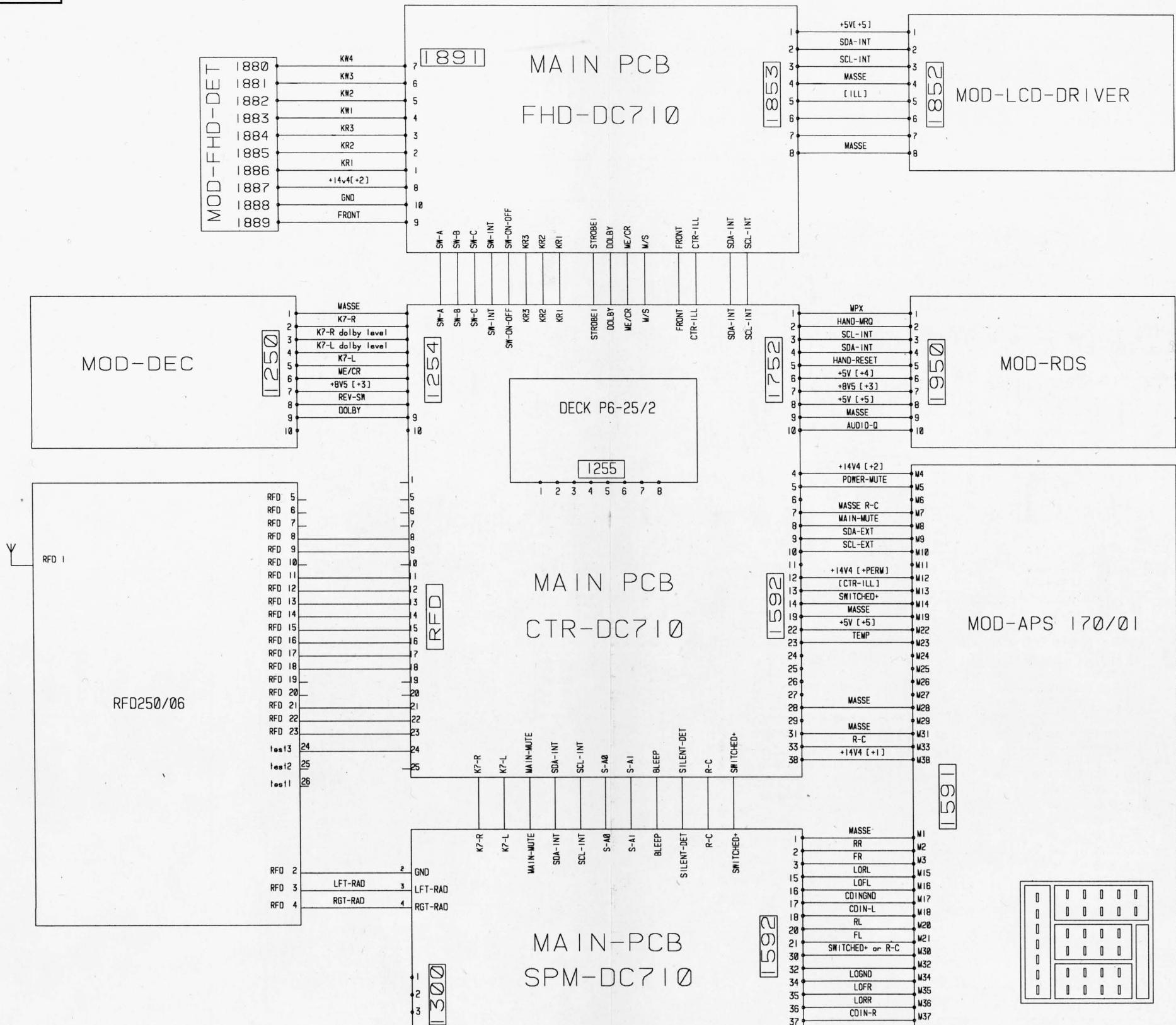


## SECURITY CODE

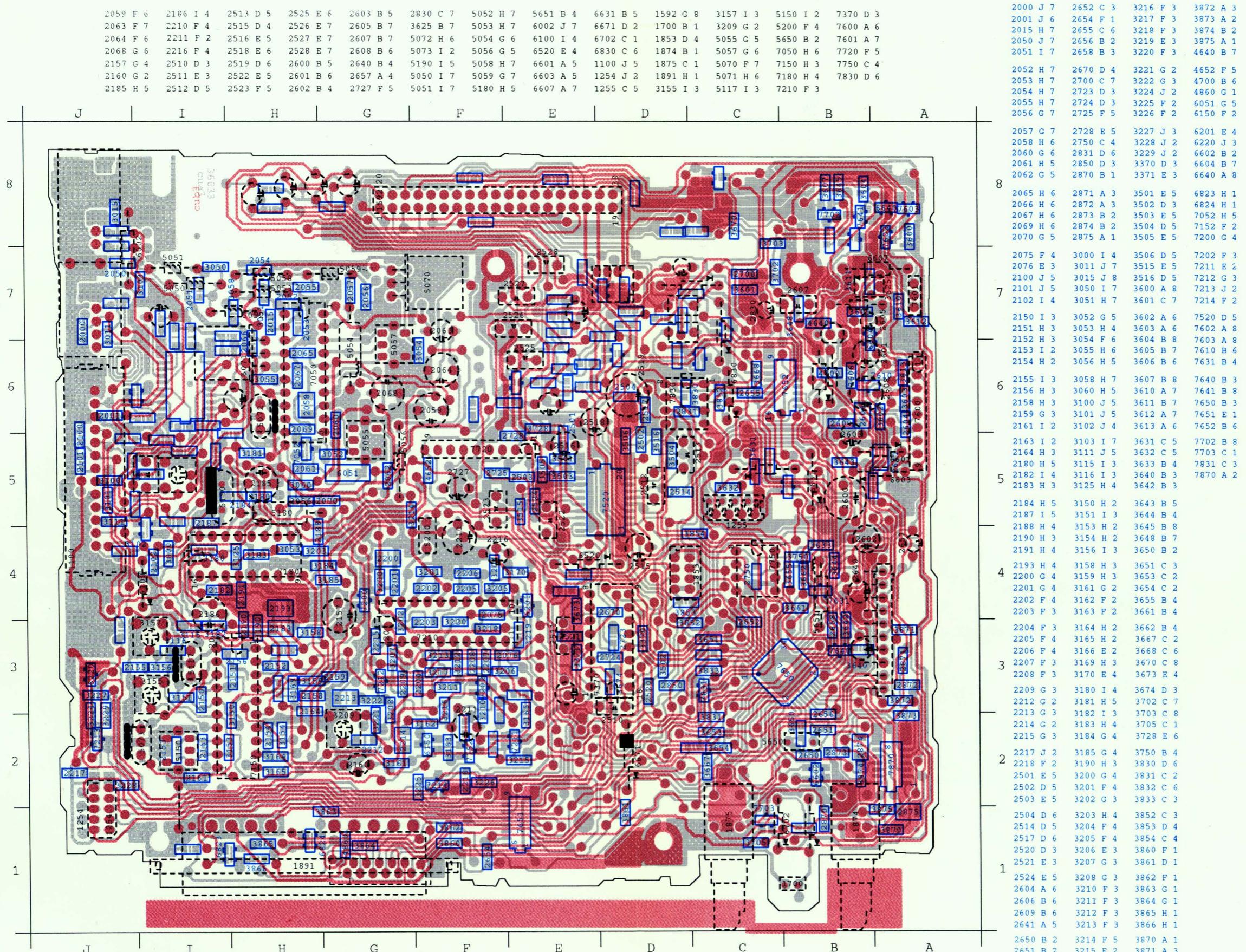


22DC710/26

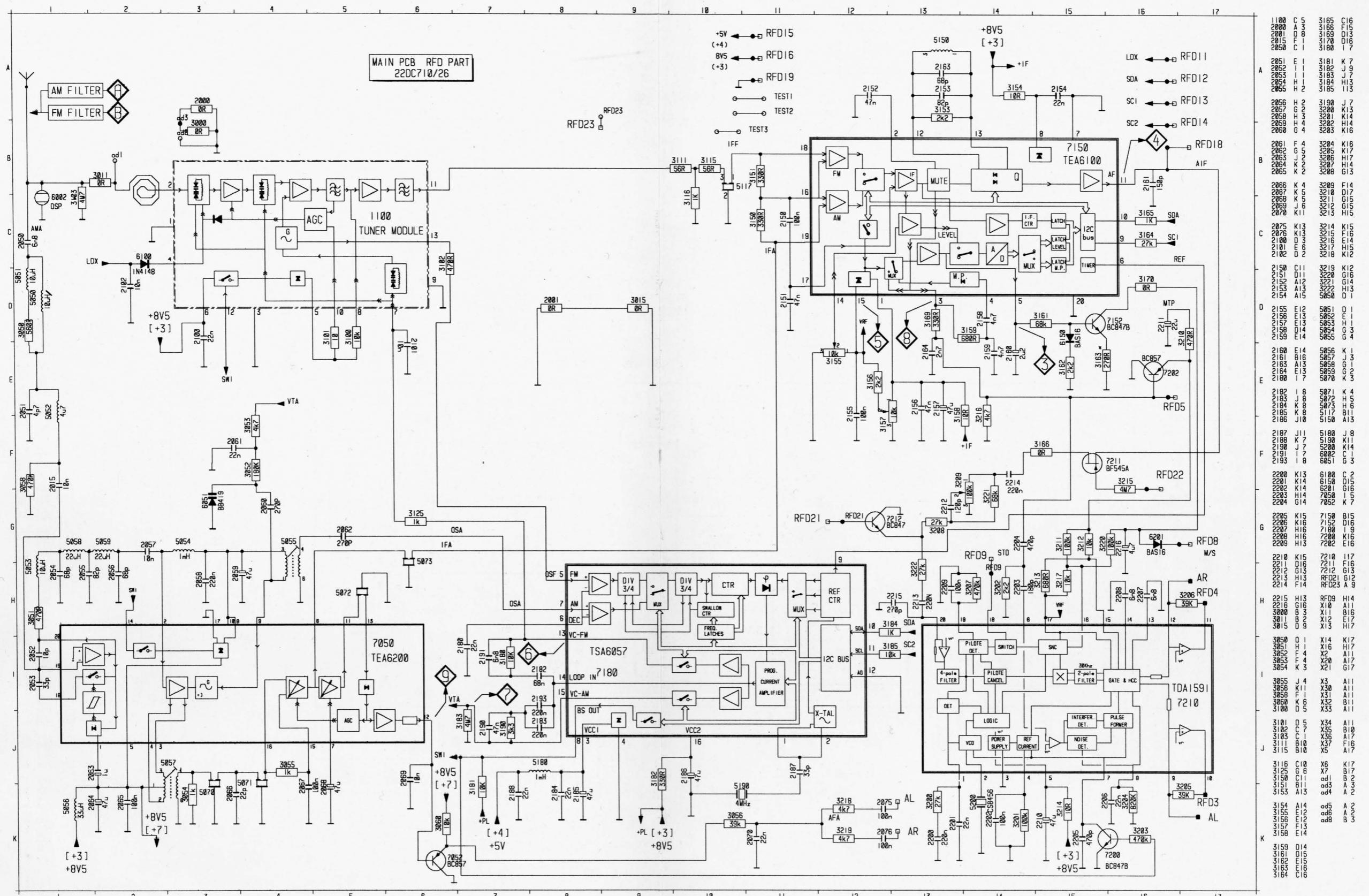
22DC710/26  
BLOCK DIAGRAM

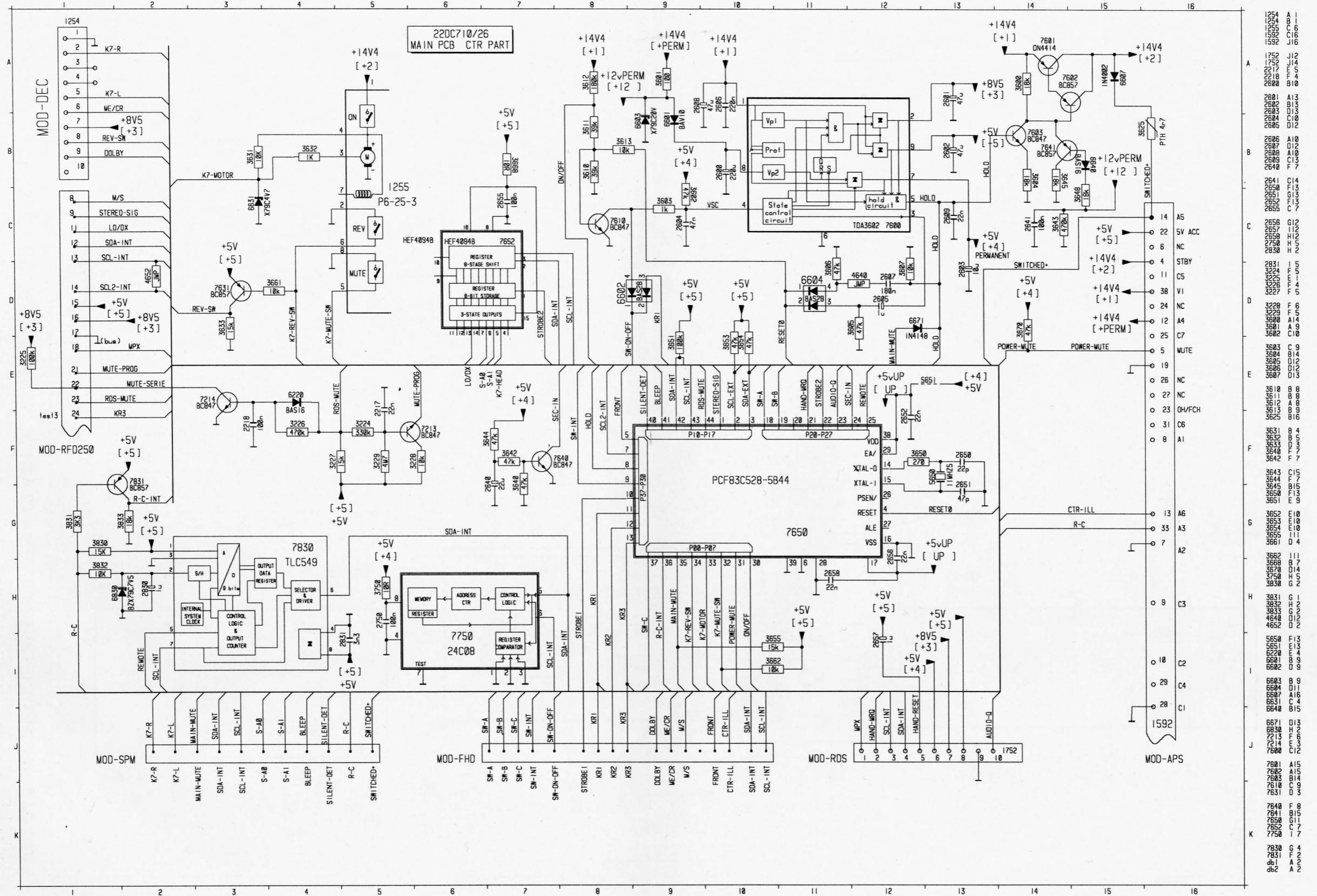


# Main Panel

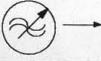


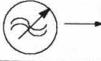
22DC710/26





For checking and adjusting see general procedures

Check	SK				Setting of controls		
Demodulated FM levels	FM	98 MHz 1 mV $\Delta f = 22.5 \text{ KHz}$ $f \text{ mod} = 1 \text{ KHz}$				 135 mV $\pm 1 \text{ dB}$	
		98 MHz 1 mV $\Delta f = 6.75 \text{ KHz}$ $f \text{ mod} = 19 \text{ KHz}$				 40 mV $\pm 1 \text{ dB}$	
		98 MHz 1 mV $\Delta f = 3.75 \text{ KHz}$ $f \text{ mod} = 57 \text{ KHz}$				 18 mV $\pm 3 \text{ dB}$	
Demodulated AM level	MW	1053 KHz 1 mV 1 KHz, 30% AM				$250 \text{ mV} \leq \text{Diamond 9} \leq 500 \text{ mV}$	
VC FM	FM					 > 1.0 V	
						 < 6.5 V	
VC AM	LW					 > 0.8 V	
	MW					 < 6.5 V	
Search level AM	MW	990 KHz 70 $\mu$ V				 1.75 V DC $\pm 0.1 \text{ V}$	
FM mute		93 Mhz 1 mv				  0 dB (775mV)	
		no signal				  <-18 dB	

Adjustment	SK					
Quad detector	FM	93 MHz 40 $\mu$ V $\Delta f = 22.5 \text{ KHz}$		93 MHz	5150	 $\leq 200 \text{ mV}$ 
FM limiting sensitivity	FM	93 MHz 13 $\mu$ V $\Delta f = 22.5 \text{ KHz}$ $f \text{ mod} = 1 \text{ KHz}$		93 MHz	3155	 1.6 V $\pm 0.1 \text{ V}$
Search level AM	MW	990 KHz 70 $\mu$ V unmodulated		990 KHz	3175	 1.75 V $\pm 0.1 \text{ V}$

## ESD



### WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.  
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

## DC VOLTAGES

### 1100 TUNER MODULE

1 = GND	8 = 1.6 V
2 = 0.0 V	9 = GND
3 = GND	10 = 1.8 V
4 = 0.0 V	11 = 0.0 V
5 = 1.8 V FM / 0.0 V AM	12 = 8.5 V AM / 0.2 V FM
6 = 8.5 V	13 = 1.8 V
7 = 1.3 V - 5.7 V	

### 7050 TEA6200

1 = 6.3 V AM	11 = 6.9 V AM
2 = 4.0 V AM	12 = 2.9 V AM
3 = 8.5 V AM	13 = 5.0 V AM
4 = 8.5 V AM	14 = 8.5 V AM / 0.2 V FM
5 = 8.5 V AM	15 = 4.7 V AM
6 = 7.3 V AM	16 = 4.7 V AM
7 = 1.4 V AM	17 = GND
8 = 4.0 V AM	18 = 5.7 V AM
9 = 4.0 V AM	19 = 1.0 V AM
10 = 4.0 V AM	20 = 5.7 V AM

### 7150 TEA 6100

1 = 8.5 V	11 = 4.3 V
2 = 0.7V	12 = 4.5 V
3 = 2.6 V - 5.0 V	13 = 4.5 V
4 = 0.0 V	14 = 2.5 V
5 = 2.0 V	15 = 4.3 V
6 = 0.2 V	16 = 2.9 V
7 = GND	17 = 2.9 V
8 = 8.5 V	18 = 2.9 V
9 = 4.8 V SCL	19 = 2.9 V
10 = 4.8 V SDA	20 = GND

### 7180 TSA6057

1 = 4 MHz	9 = 0.3 V
2 = 4 MHz	10 = 4.7 V SDA
3 = 4.7 V	11 = 4.7 V SCL
4 = GND	12 = GND
5 = 1.8 V	13 = 1.3 V - 5.7 V FM
6 = 1.5 V	14 = 2.1 V
7 = 1.8 V	15 = 1.9 V - 3.4 V AM
8 = 0.2 V FM / 8.5 V AM	16 = 8.4 V

### 7210 TDA1591

1 = 4.7 V	11 = 3.8 V
2 = 5 MHz	12 = 3.8 V
3 = GND	13 = 3.8 V
4 = 3.0 V	14 = 3.8 V
5 = 8.5 V	15 = 4.3 V
6 = 2.3 V	16 = 4.3 V
7 = 2.2 V	17 = 4.3 V
8 = 2.1 V	18 = 4.8 V
9 = 3.8 V	19 = 4.8 V
10 = 3.8 V	20 = 3.0 V

### 7370 HEF 4052BT

1 = 3.1 V	9 = 4.8 V
2 = 2.7 V	10 = GND
3 = 3.7 V	11 = GND
4 = GND	12 = 3.0 V
5 = GND	13 = 3.7 V
6 = 0.0 V	14 = GND
7 = GND	15 = 3.2 V
8 = GND	16 = 7.3 V

### 7520 TEA6330T

1 = 8.0 V	11 = 5.0 V
2 = 3.8 V	12 = 4.8 V
3 = GND	13 = 3.8 V
4 = 3.8 V	14 = 3.8 V
5 = 3.8 V	15 = 3.8 V
6 = 3.8 V	16 = 3.8 V
7 = 3.8 V	17 = 3.8 V
8 = 3.8 V	18 = 7.6 V
9 = 5.0 V	19 = 3.8 V
10 = GND	20 = 3.8 V

7651 HEF4094B	
1 = 0.0 V	9 = N.C.
2 = 4.8 V	10 = N.C.
3 = 5.0 V	11 = 0.0 V Mono/ 5.0 V Stereo
4 = 0.0 V	12 = 0.0 V / 5.0 V ME/CR
5 = 0.0 V	13 = 0.0 V / 5.0 V Dolby
6 = 0.0 V	14 = N.C.
7 = 0.0 V	15 = 5.0 V
8 = GND	16 = 5.0 V

### 7652 HEF4094B

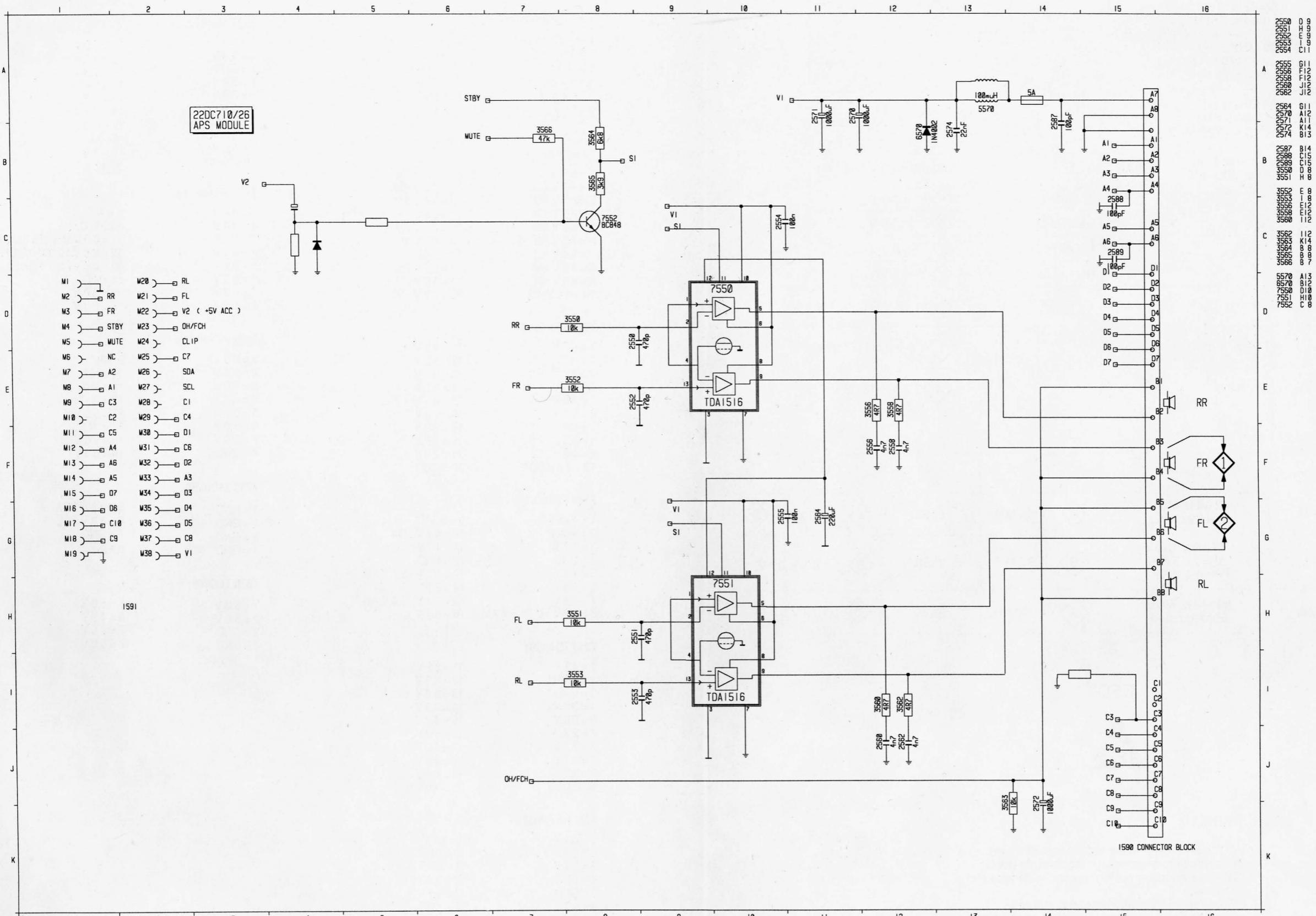
1 = 0.0 V	9 = N.C.
2 = 5.0 V	10 = N.C.
3 = 5.0 V	11 = N.C.
4 = N.C.	12 = N.C.
5 = 0.0 V	13 = 0.0 V
6 = 5.0 V	14 = N.C.
7 = 5.0 V	15 = 5.0 V
8 = GND	16 = 5.0 V

### 7750 24C08B6

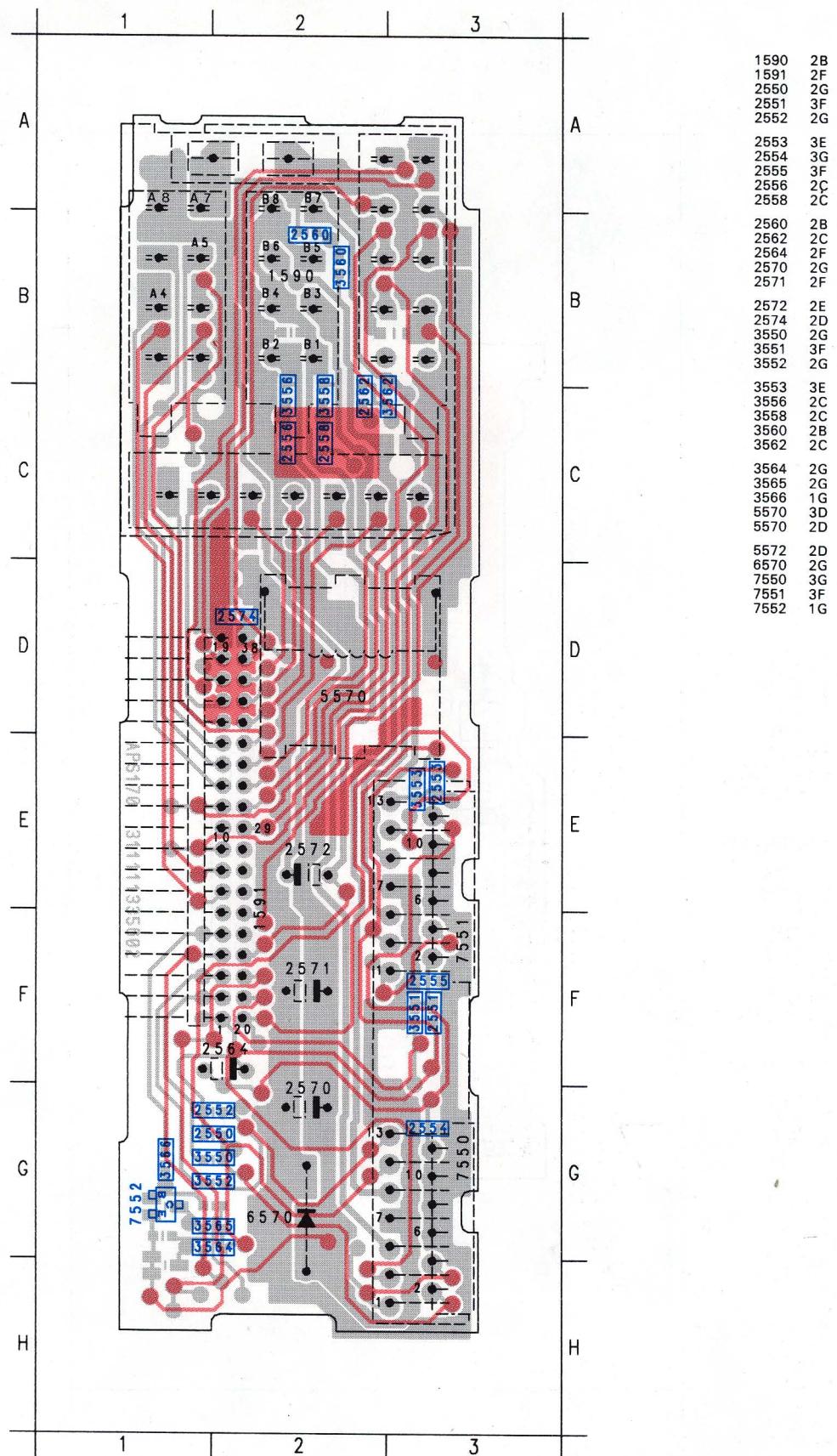
1 = GND	5 = 4.8 V SDA
2 = GND	6 = 4.8 V SCL
3 = GND	7 = GND
4 = GND	8 = 5 V

7830 TLC549	
1 = 5.0 V	5 = 5.0 V
2 = 5.0 V	6 = 4.9 V
3 = GND	7 = 5.0 V
4 = GND	8 = 5.0 V



# Power Module

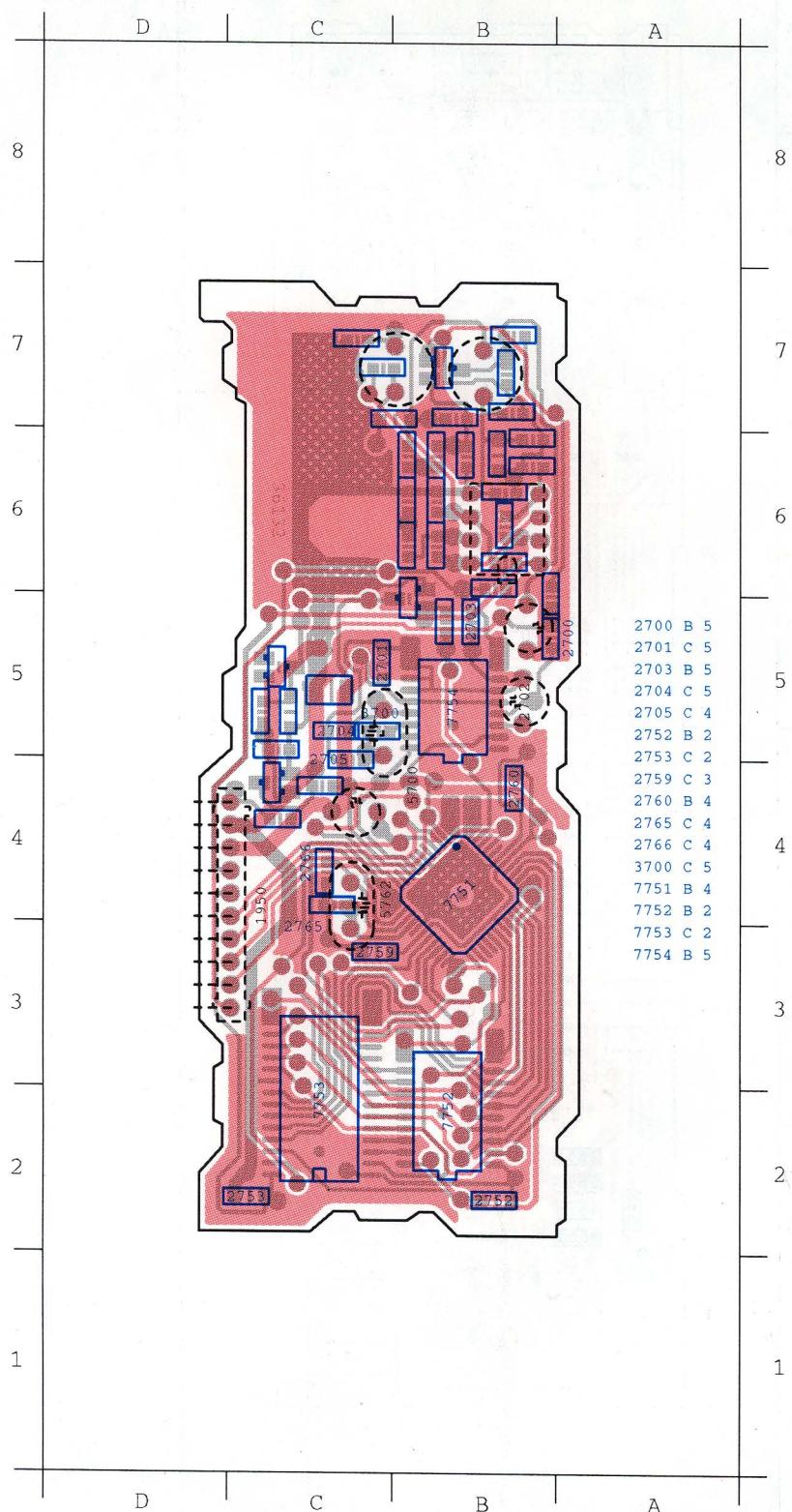


22DC710/26

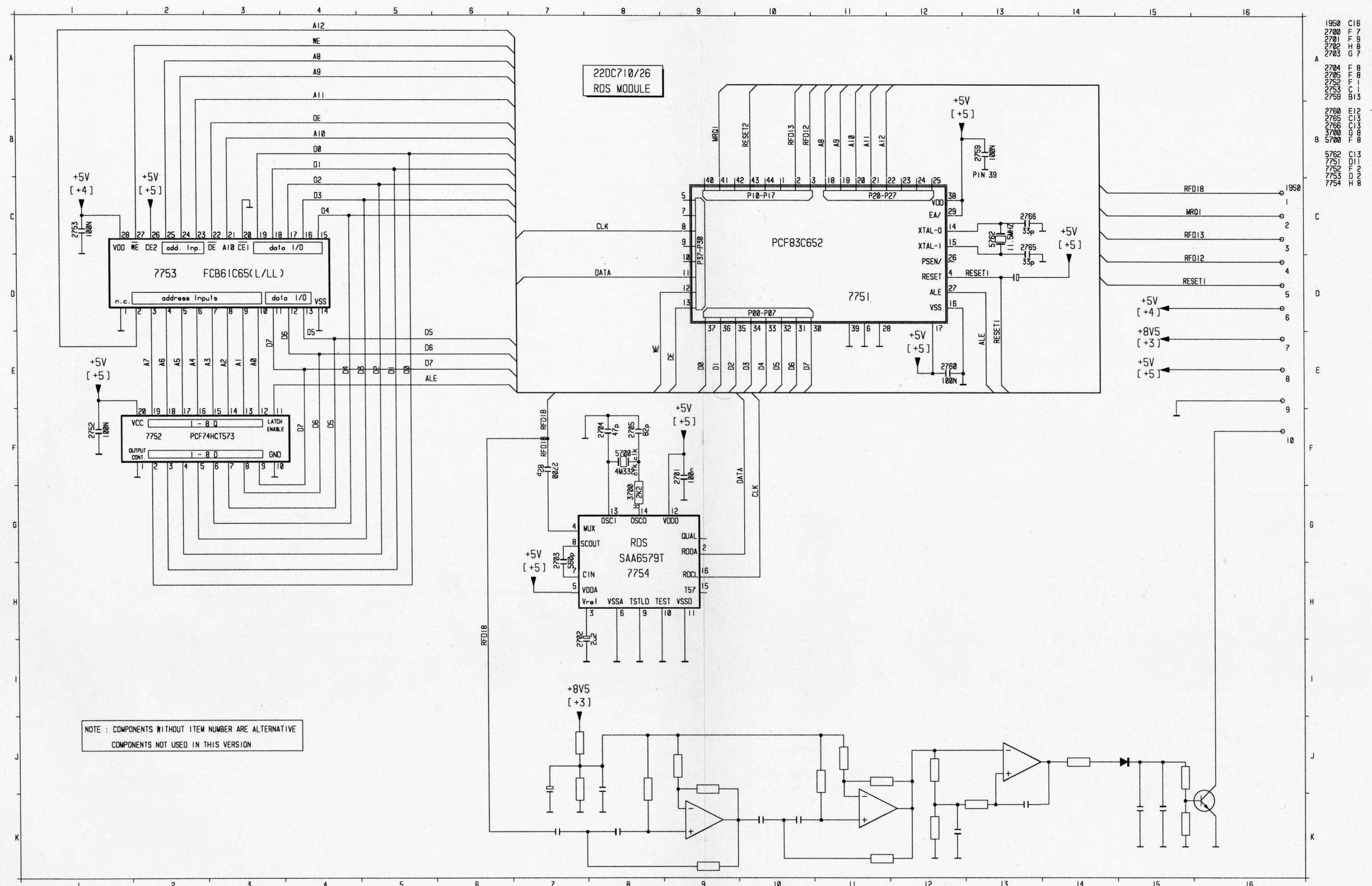
# RDS Module

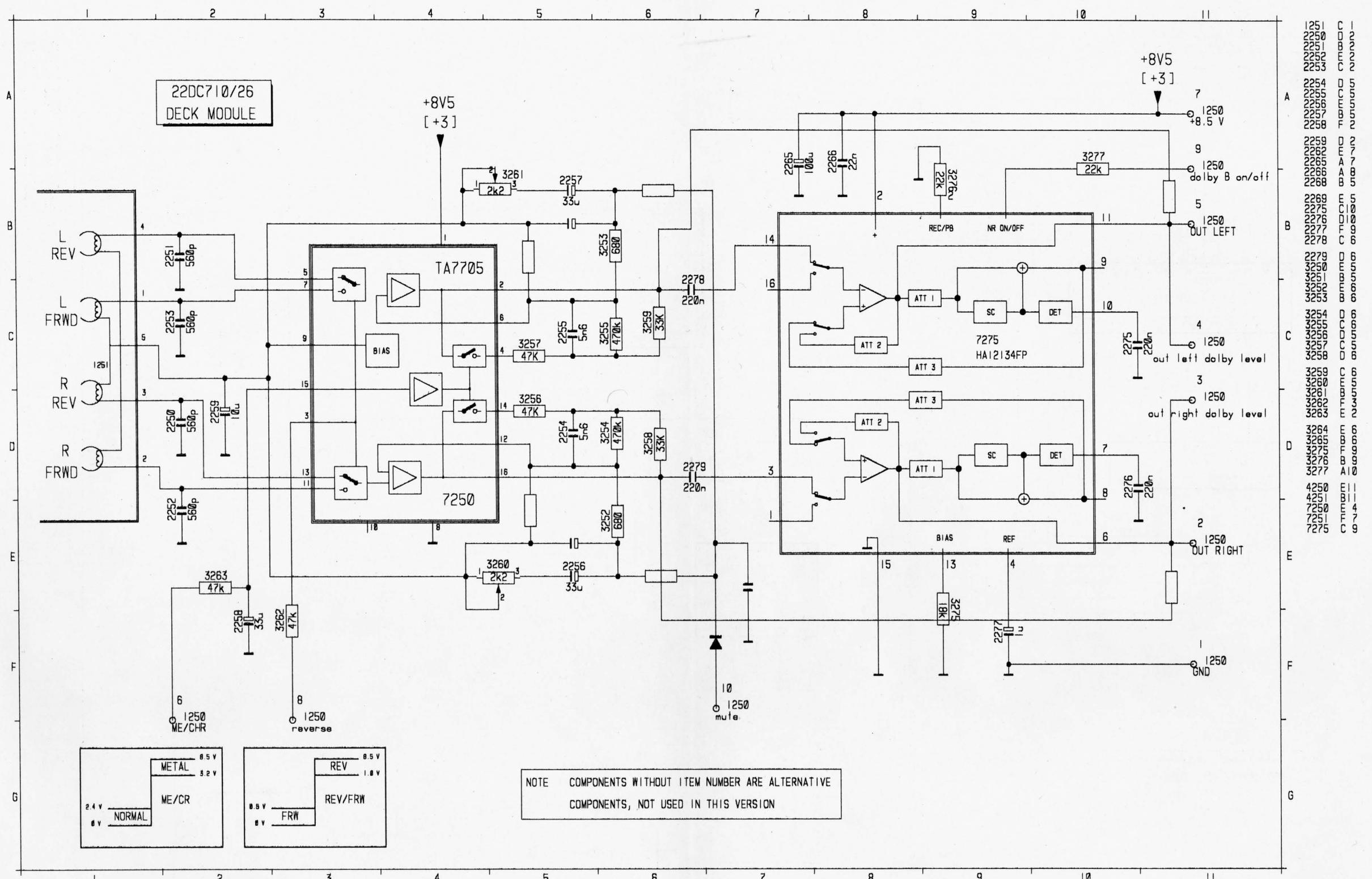
Siemens Rev D4

1950 C 4    2702 B 5    5700 C 5    5762 C 4

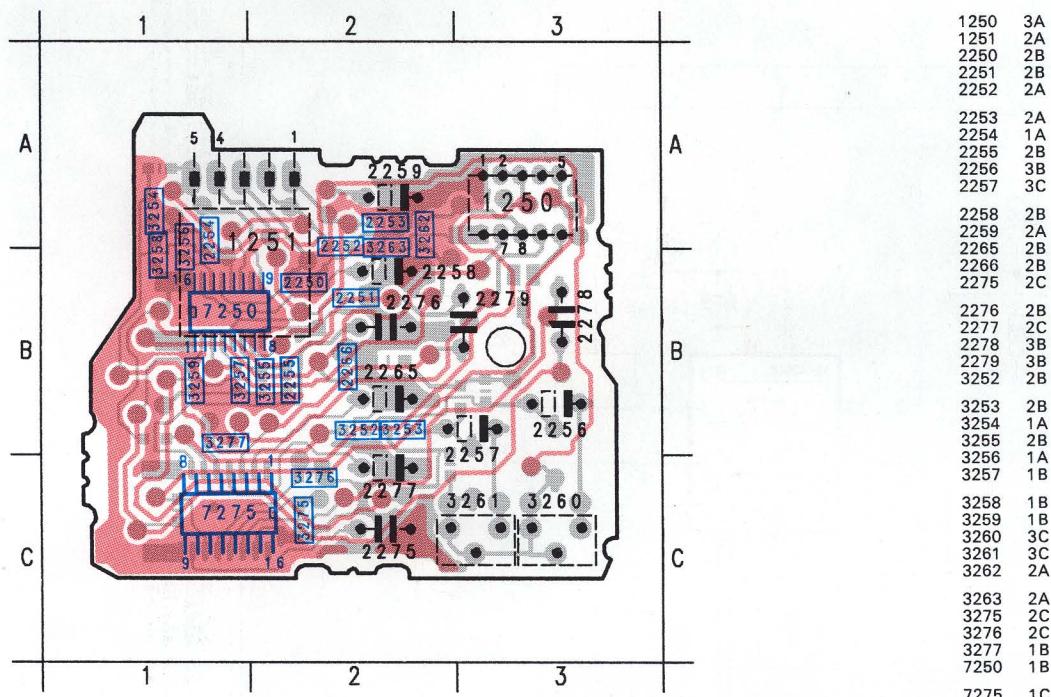


22DC710/26

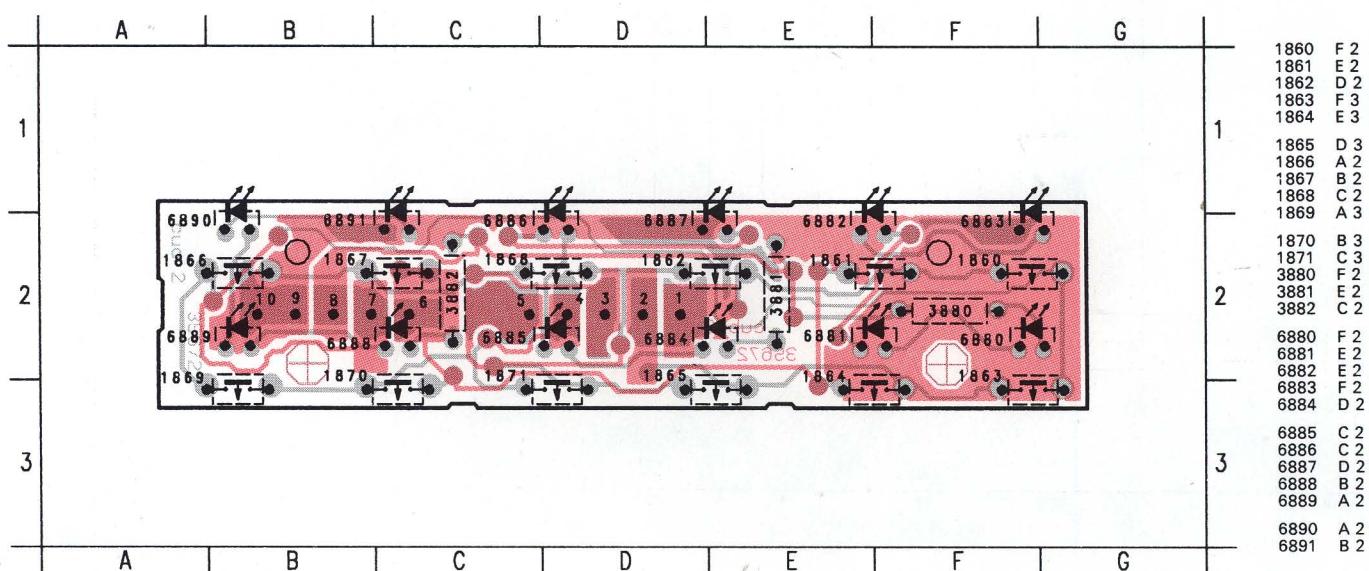




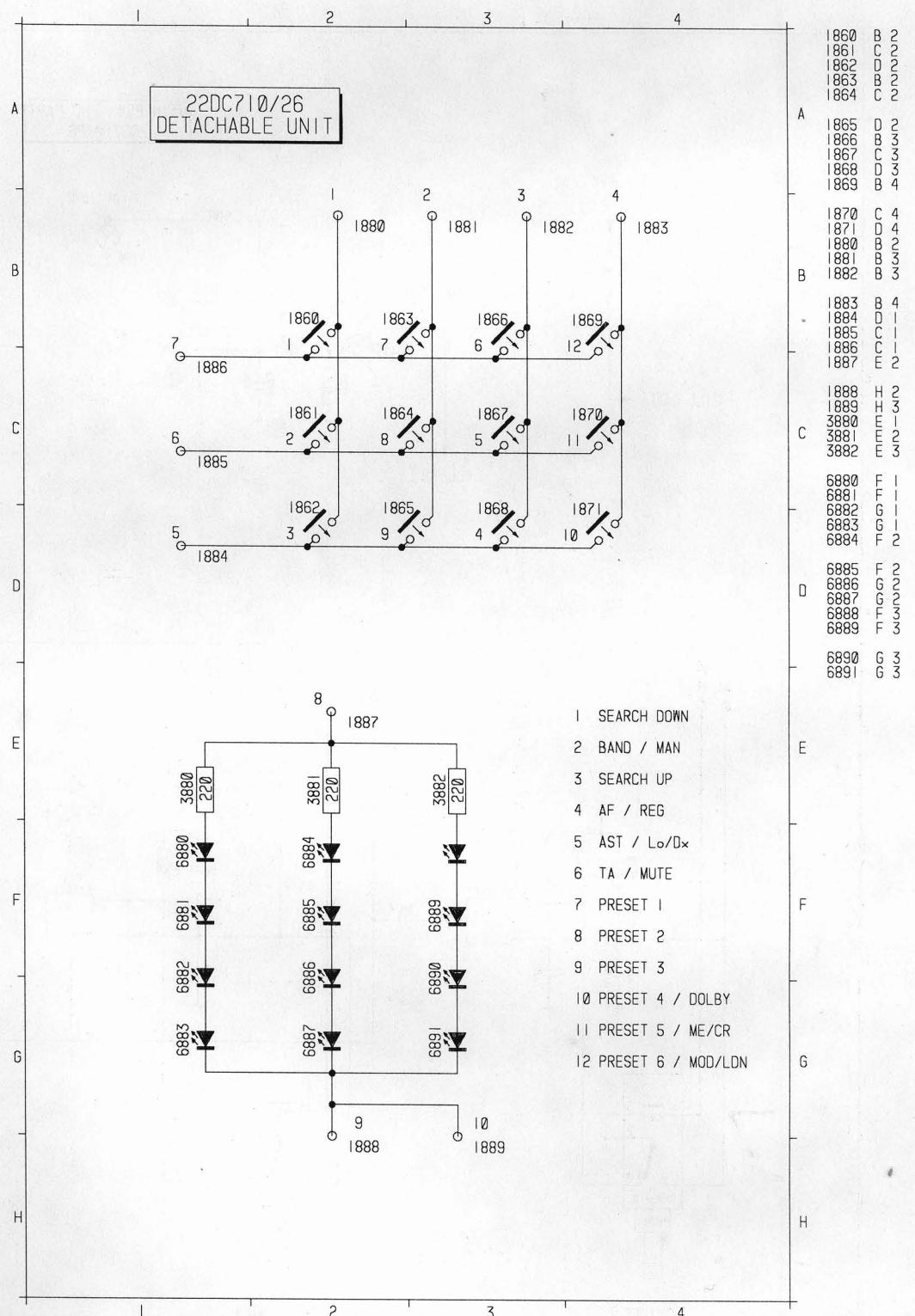
# Deck Module

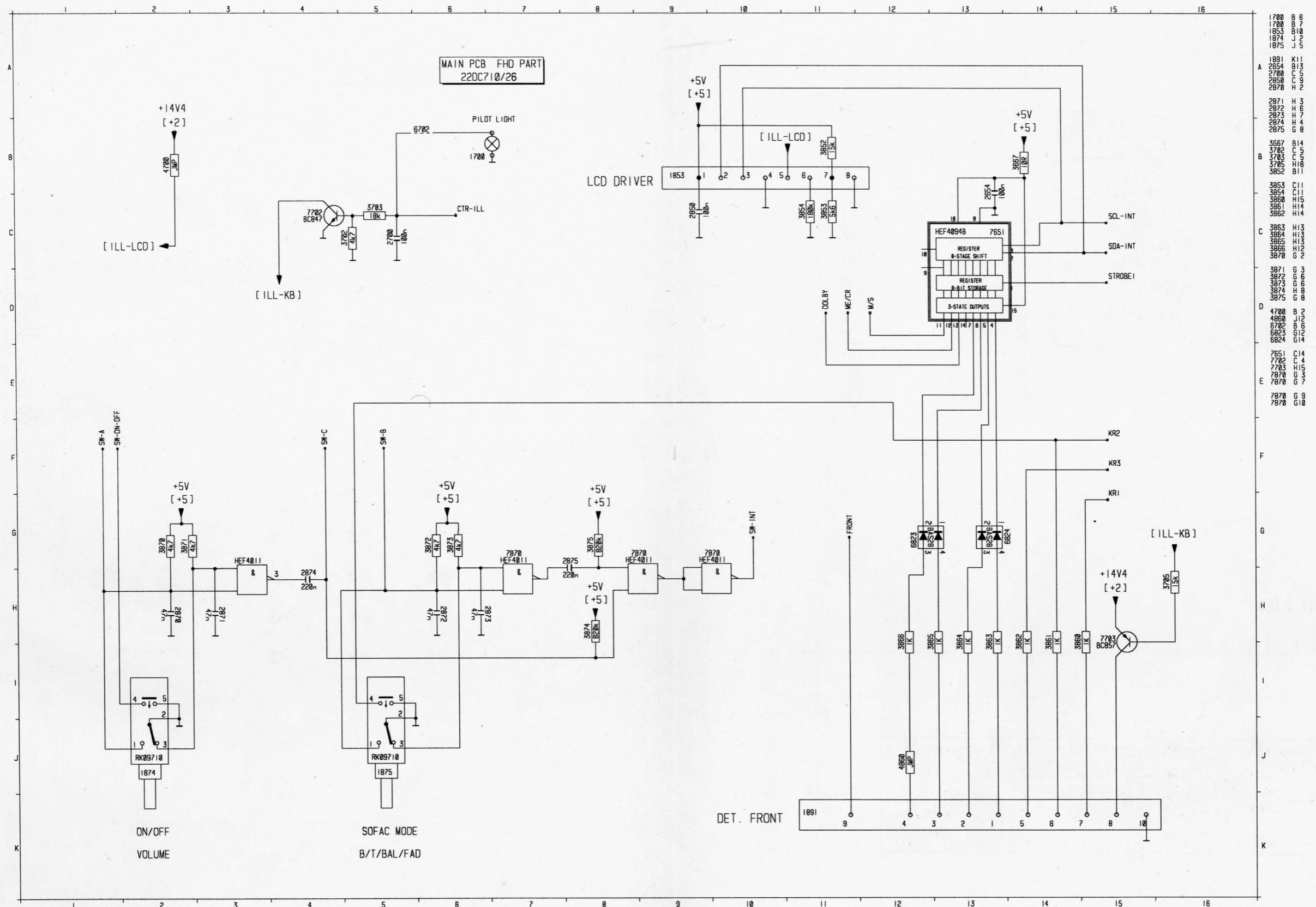


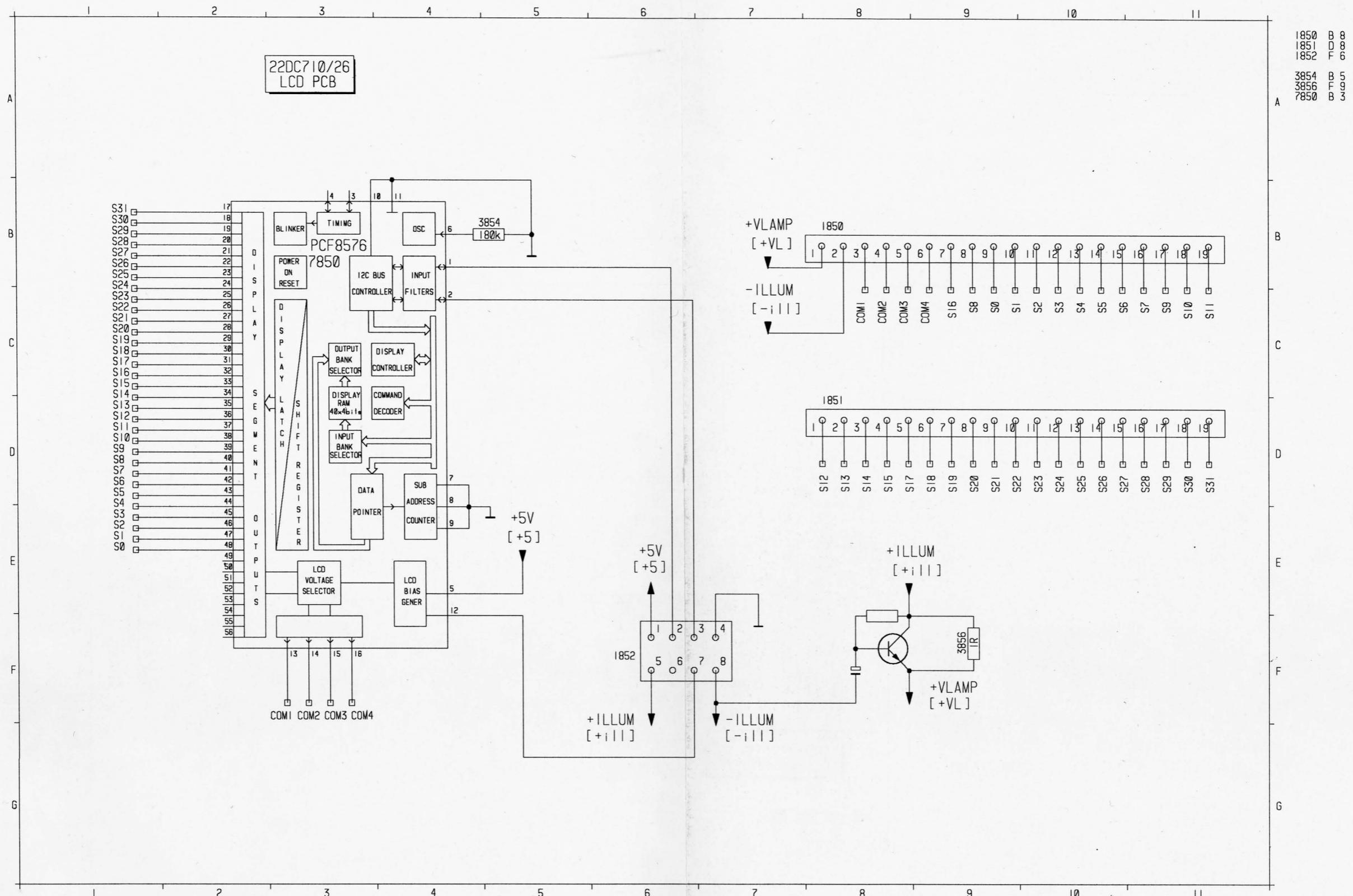
# Detachable Unit

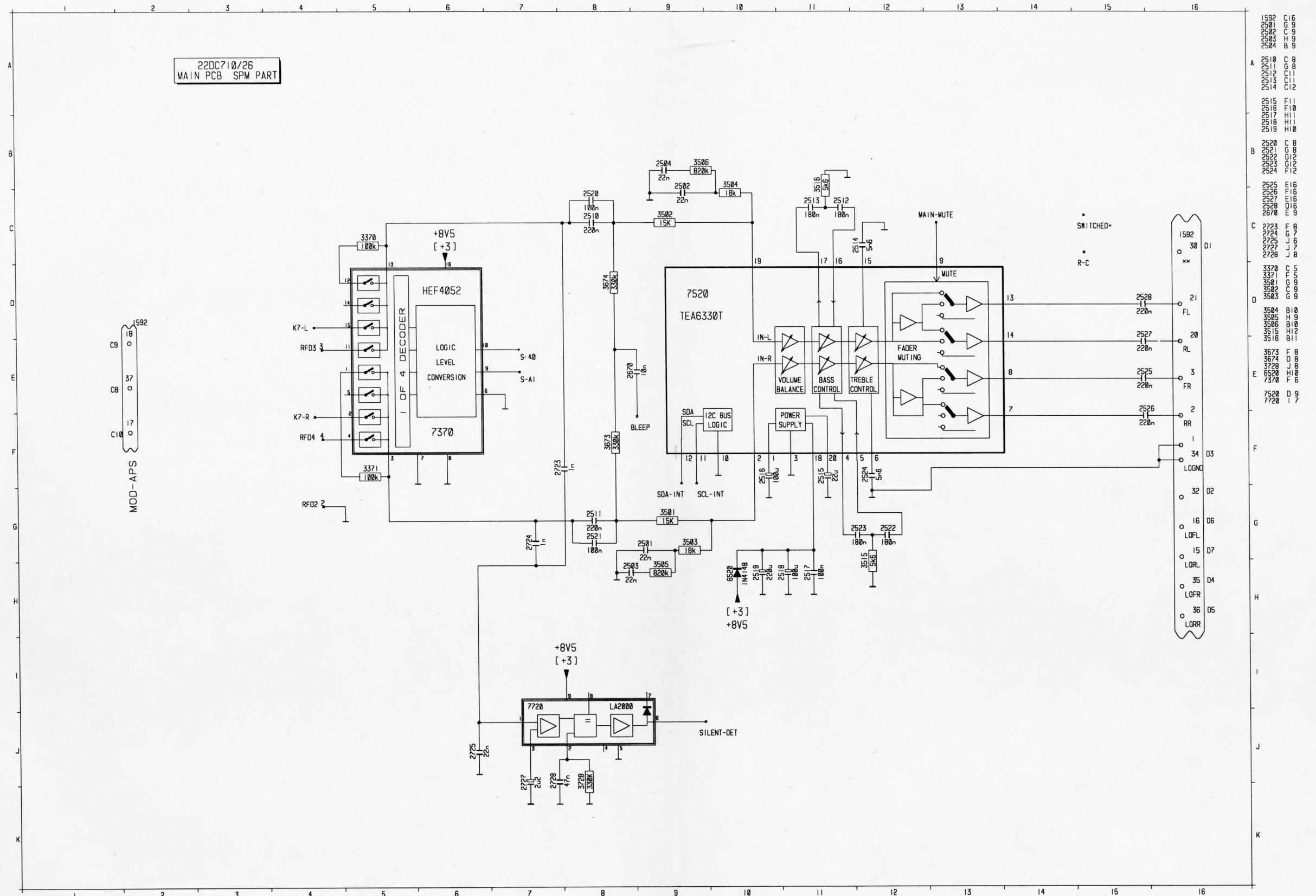


22DC710/26

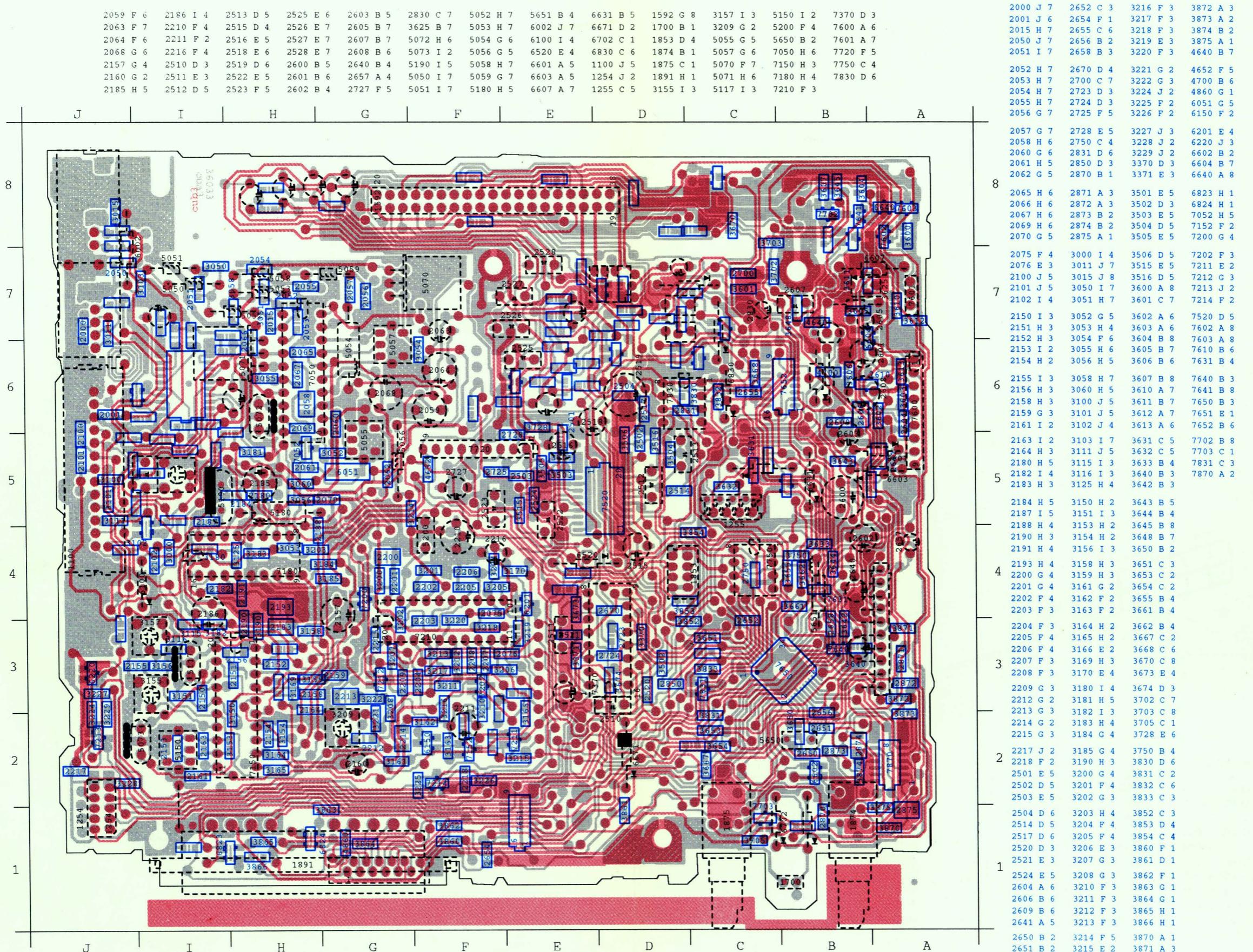




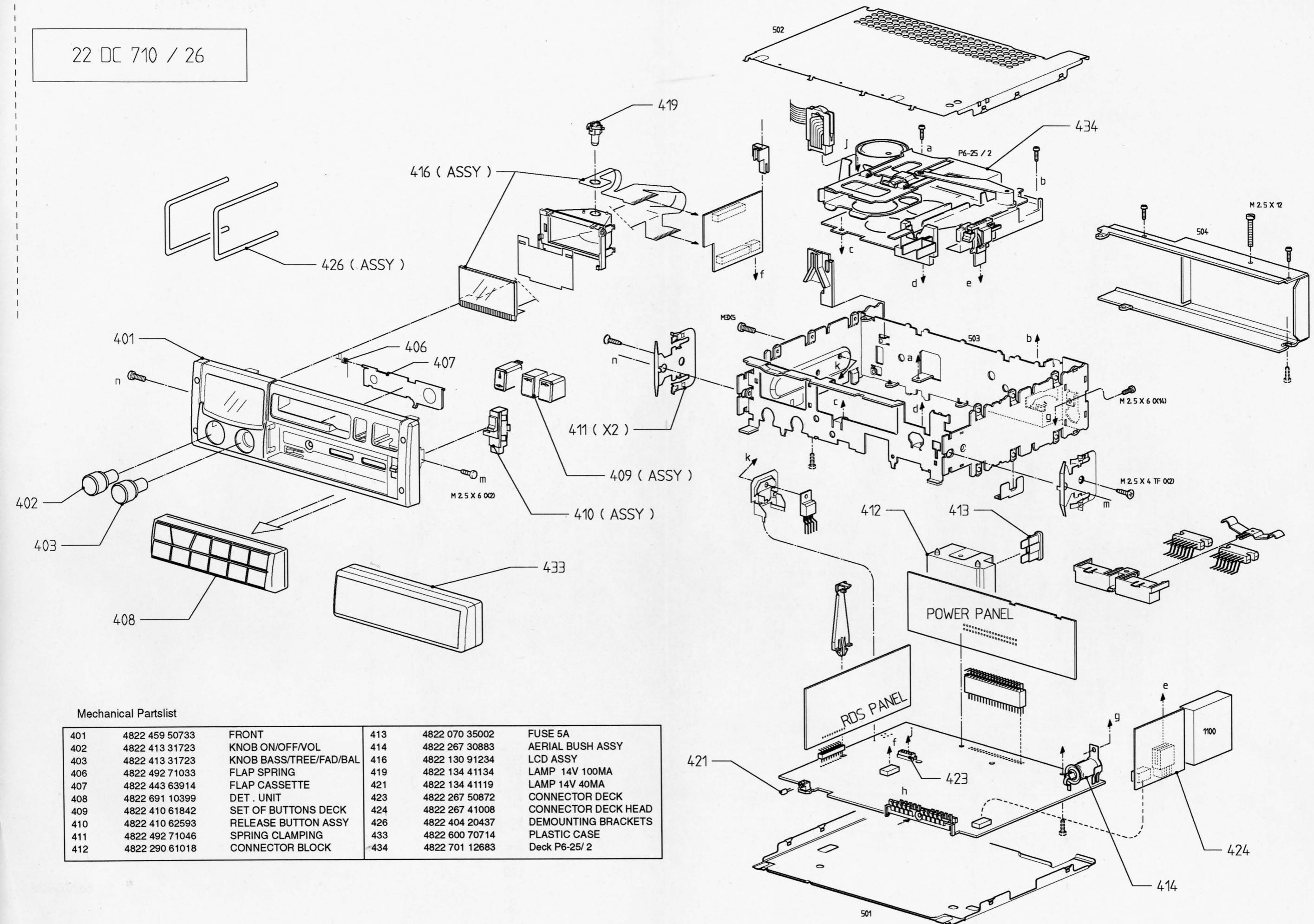




# Main Panel



22 DC 710 / 26



Miscellaneous			-II-	
1100	4822 210 10305	TUNER	2161	4822 122 33181      150pF 5% NP0 50V
1850	4822 267 60238	19 PINS	2163	4822 122 33514      68pF 5% NP0 50V
1851	4822 267 60238	19 PINS	2164	4822 122 32627      2.7nF 10% X7R 50V
1860	4822 276 13103	TACT SWITCH	2180	5322 122 32654      22nF 10% X7R 63V
1861	4822 276 13103	TACT SWITCH	2182	4822 122 32891      68nF 10% X7R 63V
1862	4822 276 13103	TACT SWITCH	2183	4822 122 32916      220nF 10% X7R 63V
1863	4822 276 13103	TACT SWITCH	2184	5322 122 32654      22nF 10% X7R 63V
1864	4822 276 13103	TACT SWITCH	2185	4822 124 23624      47μF 20% 16V
1865	4822 276 13103	TACT SWITCH	2186	4822 124 23624      47μF 20% 16V
1866	4822 276 13103	TACT SWITCH	2187	5322 122 32659      33pF 5% 50V
1867	4822 276 13103	TACT SWITCH	2188	5322 122 32654      22nF 10% X7R 63V
1868	4822 276 13103	TACT SWITCH	2190	4822 122 32542      47nF 10% X7R 63V
1869	4822 276 13103	TACT SWITCH	2191	4822 122 32597      6,8nF 10% X7R 63V
1870	4822 276 13103	TACT SWITCH	2193	4822 122 32916      220nF 10% X7R 63V
1871	4822 276 13103	TACT SWITCH	2200	4822 122 32916      220nF 10% X7R 63V
1874	4822 273 10261	POTM	2201	5322 122 32654      22nF 10% X7R 63V
1875	4822 273 10261	POTM	2202	4822 122 33496      100nF 10% X7R 63V
-II-			2203	4822 122 31768      180pF 2% NP0 63V
-II-			2204	5322 122 32268      470pF 10% 50V
-II-			2205	5322 122 32268      470pF 10% 50V
2000	4822 117 10287	R05	2206	5322 122 32654      22nF 10% X7R 63V
2001	4822 117 10287	R05	2207	5322 122 31866      6,8nF 10% X7R 63V
2015	5322 122 34098	10nF 10% X7R 63V	2208	5322 122 31866      6,8nF 10% X7R 63V
2050	4822 122 32597	6,8nF 10% X7R 63V	2209	4822 122 33496      100nF 10% X7R 63V
2051	5322 122 32287	4,7pF 5% NP0 50V	2210	4822 124 23624      47μF 20% 16V
2052	5322 122 32448	10pF 5% 50V	2211	4822 124 41796      22μF 20% 16V
2053	5322 122 32659	33pF 5% 50V	2212	4822 122 31766      120pF 2% NP0 63V
2054	4822 122 33514	68pF 5% NP0 50V	2213	4822 122 32916      220nF 10% X7R 63V
2055	4822 122 33515	82pF 5% NP0 63V	2214	4822 122 32916      220nF 10% X7R 63V
2056	4822 122 33514	63pF 5% NP0 50V	2215	4822 122 33216      270pF 5% NP0 50V
2057	5322 122 34098	10nF 10% X7R 63V	2216	4822 124 41972      4,7μF 20% 50V
2058	4822 122 32916	220nF 10% X7R 63V	2217	4822 122 31797      22nF 10% X7R 63V
2059	4822 124 23624	47μF 20% 16V	2218	4822 122 33496      100nF 10% X7R 63V
2060	4822 122 33216	270pF 5% NP0 50V	2250	4822 126 10333      560pF 10% X7R 63V
2061	5322 122 32654	22nF 10% X7R 63V	2251	4822 126 10333      560pF 10% X7R 63V
2062	4822 122 33216	270pF 5% NP0 50V	2252	4822 126 10333      560pF 10% X7R 63V
2063	4822 124 41969	1μF 20% 50V	2253	4822 126 10333      560pF 10% X7R 63V
2064	4822 124 23624	47μF 20% 16V	2254	4822 122 32646      5,6nF 10% X7R 50V
2065	4822 122 33496	100nF 10% X7R 63V	2255	4822 122 32646      5,6nF 10% X7R 50V
2066	5322 122 32658	22pF 5% 50V	2256	4822 124 40272      33μF 20% 16V
2067	4822 122 33496	100nF 10% X7R 63V	2257	4822 124 40272      33μF 20% 16V
2068	4822 124 23624	47μF 20% 16V	2258	4822 124 40272      33μF 20% 16V
2069	5322 122 34098	10nF 10% X7R 63V	2259	4822 124 22403      10μF 20% 16V
2070	5322 122 32654	22nF 10% X7R 63V	2265	4822 124 23432      100μF 20% 10V
2075	4822 122 33496	100nF 10% X7R 63V	2266	5322 122 32654      22nF 10% X7R 63V
2076	4822 122 33496	100nF 10% X7R 63V	2275	4822 121 42408      220nF 5% 63V
2100	5322 122 32654	22nF 10% X7R 63V	2276	4822 121 42408      220nF 5% 63V
2101	5322 122 34098	10nF 10% X7R 63V	2277	4822 124 41969      1μF 20% 50V
2102	5322 122 34098	10nF 10% X7R 63V	2278	4822 121 42408      220nF 5% 63V
2150	4822 122 33496	100nF 10% X7R 63V	2279	4822 121 42408      220nF 5% 63V
2151	4822 122 32542	47nF 10% X7R 63V	2501	5322 122 32654      22nF 10% X7R 63V
2152	4822 122 32542	47nF 10% X7R 63V	2502	5322 122 32654      22nF 10% X7R 63V
2153	4822 122 33515	82pF 5% NP0 63V	2503	5322 122 32654      22nF 10% X7R 63V
2154	5322 122 32654	22nF 10% X7R 63V	2504	5322 122 32654      22nF 10% X7R 63V
2155	4822 122 33496	100nF 10% X7R 63V	2510	4822 121 42408      220nF 5% 63V
2156	4822 122 32542	47nF 10% X7R 63V	2511	4822 121 42408      220nF 5% 63V
2157	4822 124 23624	47μF 20% 16V	2512	4822 121 51356      180nF 10% 63V
2158	5322 126 10223	4,7nF 10% X7R 63V	2513	4822 121 51356      180nF 10% 63V
2159	5322 126 10223	4,7nF 10% X7R 63V	2514	4822 122 32646      5,6nF 10% X7R 50V
2160	4822 124 40244	2,2μF 20% 63V		

2515	4822 124 41796	22μF 20% 16V	2705	4822 122 33515
2516	4822 124 23432	100μF 20% 10V	2723	5322 122 34123
2517	4822 122 33496	100nF 10% X7R 63V	2724	5322 122 34123
2518	4822 124 23432	100μF 20% 10V	2725	5322 122 32654
2519	4822 124 23768	220μF 20% 10V	2727	4822 124 40244
2520	4822 122 33496	100nF 10% X7R 63V	2728	4822 122 32542
2521	4822 122 33496	100nF 10% X7R 63V	2750	4822 122 33496
2522	4822 121 51356	180nF 10% 63V	2752	4822 122 33496
2523	4822 121 51356	180nF 10% 63V	2753	4822 122 33496
2524	4822 122 32646	5,6nF 10% X7R 50V	2759	4822 122 33496
2525	4822 121 42408	220nF 5% 63V	2760	4822 122 33496
2526	4822 121 42408	220nF 5% 63V	2765	5322 122 32659
2527	4822 121 42408	220nF 5% 63V	2766	5322 122 32659
2528	4822 121 42408	220nF 5% 63V	2830	4822 124 41969
2550	5322 122 32268	470pF 10% 50V	2831	4822 122 33891
2551	5322 122 32268	470pF 10% 50V	2850	4822 122 33496
2552	5322 122 32268	470pF 10% 50V	2870	4822 122 32542
2553	5322 122 32268	470pF 10% 50V	2871	4822 122 32542
2554	4822 122 33496	100nF10% X7R 63V	2872	4822 122 32542
2555	4822 122 33496	100nF10% X7R 63V	2873	4822 122 32542
2556	5322 126 10223	4,7nF 10% X7R 63V	2874	4822 122 32916
2558	5322 126 10223	4,7nF 10% X7R 63V	2875	4822 122 32916
2560	5322 126 10223	4,7nF 10% X7R 63V		
2562	5322 126 10223	4,7nF 10% X7R 63V		
2564	4822 124 22711	100μF 20% 10V		
2570	4822 124 40201	1000μF 20% 16V	3000	4822 117 10287
2571	4822 124 40201	1000μF 20% 16V	3011	4822 117 10287
2572	4822 124 40201	1000μF 20% 16V	3015	4822 117 10287
2574	5322 122 32654	22nF 10% X7R 63V	3050	4822 051 20561
2587	5322 122 32531	100pF 5%NP0 50V	3051	4822 051 20471
2588	5322 122 32531	100pF 5%NP0 50V	3052	4822 051 20184
2589	5322 122 34098	10nF10%X7R 63V	3053	4822 051 20472
2600	4822 124 21519	220μF 16V	3054	4822 051 20102
2601	4822 124 41506	47μF 20% 16V	3055	4822 051 20102
2602	4822 124 41506	47μF 20% 16V	3056	4822 051 20393
2603	4822 124 40248	10μF20% 63V	3058	4822 051 20474
2604	4822 122 32542	47nF10%X7R 63V	3060	4822 051 20103
2605	4822 124 41969	1μF20% 50V	3100	4822 051 20103
2606	4822 122 32916	220nF10%X7R 63V	3101	4822 051 20109
2607	4822 121 51356	180nF10% 63V	3102	4822 051 20471
2608	4822 124 41506	47μF 20% 16V	3103	4822 051 20475
2609	5322 122 32654	22nF10%X7R 63V	3111	4822 051 20569
2640	4822 124 41796	22μF20% 16V	3115	4822 051 20569
2641	4822 122 33496	100nF10%X7R 63V	3116	4822 051 20102
2650	5322 122 32658	22pF 5% 50V	3125	4822 051 20102
2651	5322 122 32452	47pF 5%NP0 63V	3150	4822 051 20331
2652	5322 122 32654	22nF10%X7R 63V	3151	4822 051 20331
2654	4822 122 33496	100nF10%X7R 63V	3153	4822 051 20222
2655	4822 122 33496	100nF10%X7R 63V	3154	4822 051 20109
2656	5322 122 32654	22nF10%X7R 63V	3155	4822 100 20166
2657	4822 124 41969	1μF20% 50V	3156	4822 051 20222
2658	5322 122 32654	22nF10%X7R 63V	3157	4822 100 20166
2670	5322 122 34098	10nF10%X7R 63V	3158	4822 051 20109
2700	4822 122 33496	100nF10%X7R 63V	3159	4822 051 20681
2700	4822 122 33515	82pF 5%NP0 63V	3161	4822 051 20683
2701	4822 122 33496	100nF10%X7R 63V	3162	4822 051 20222
2702	4822 124 40244	2,2μF20% 63V	3163	4822 051 20271
2703	4822 126 10333	560pF10%X7R 63V	3164	4822 051 20273
2704	5322 122 32452	47pF 5%NP0 63V	3165	4822 051 20102
			3166	4822 117 10287
				R05

3169	4822 051 20331	330Ω 5% 0,1W	3505	4822 051 20824	820K 5% 0,1W
3170	4822 117 10287	R05	3506	4822 051 20824	820K 5% 0,1W
3180	4822 051 20103	10K 5% 0,1W	3515	4822 051 20562	5K60 5% 0,1W
3181	4822 051 20103	10K 5% 0,1W	3516	4822 051 20562	5K60 5% 0,1W
3182	4822 051 20331	330Ω 5% 0,1W	3550	4822 051 20103	10K 5% 0,1W
3183	4822 051 20475	4M70 5% 0,1W	3551	4822 051 20103	10K 5% 0,1W
3184	4822 051 20102	1K 5% 0,1W	3552	4822 051 20103	10K 5% 0,1W
3185	4822 051 20103	10K 5% 0,1W	3553	4822 051 20103	10K 5% 0,1W
3190	4822 051 20332	3K30 5% 0,1W	3556	4822 051 20478	4R70 5% 0,1W
3200	4822 051 20273	27K 5% 0,1W	3558	4822 051 20478	4R70 5% 0,1W
3201	4822 051 20104	100K 5% 0,1W	3560	4822 051 20478	4R70 5% 0,1W
3202	4822 051 20222	2K20 5% 0,1W	3562	4822 051 20478	4R70 5% 0,1W
3203	4822 051 20474	470K 5% 0,1W	3563	4822 051 20102	1K 5% 0,1W
3204	4822 051 20824	820K 5% 0,1W	3564	4822 051 20682	6K80 5% 0,1W
3205	4822 051 20393	39K 5% 0,1W	3565	4822 051 20392	3K90 5% 0,1W
3206	4822 051 20393	39K 5% 0,1W	3566	4822 051 20473	47K 5% 0,1W
3207	4822 051 20474	470K 5% 0,1W	3600	4822 051 20183	18K 5% 0,1W
3208	4822 051 20273	27K 5% 0,1W	3601	4822 051 20101	100Ω 5% 0,1W
3209	4822 100 11163	100K 30%LIN 0,1W	3602	4822 051 20473	47K 5% 0,1W
3210	4822 051 20471	470Ω 5% 0,1W	3603	4822 051 20102	1K 5% 0,1W
3211	4822 051 20104	100K 5% 0,1W	3604	4822 051 20183	18K 5% 0,1W
3212	4822 051 20103	10K 5% 0,1W	3605	4822 051 20473	47K 5% 0,1W
3213	4822 051 20681	680Ω 5% 0,1W	3606	4822 051 20473	47K 5% 0,1W
3214	4822 051 20109	10Ω 5% 0,1W	3607	4822 051 20103	10K 5% 0,1W
3215	4822 051 20475	4M7 5% 0,1W	3610	4822 051 20393	39K 5% 0,1W
3216	4822 051 20472	4K70 5% 0,1W	3611	4822 051 20393	39K 5% 0,1W
3217	4822 051 20103	10K 5% 0,1W	3612	4822 051 20184	180K 5% 0,1W
3218	4822 051 20472	4K70 5% 0,1W	3613	4822 051 20103	10K 5% 0,1W
3219	4822 051 20472	4K70 5% 0,1W	3625	4822 116 40216	4R7
3220	4822 051 20104	100K 5% 0,1W	3631	4822 051 20103	10K 5% 0,1W
3221	4822 051 20683	68K 5% 0,1W	3632	4822 051 20102	1K 5% 0,1W
3222	4822 051 20273	27K 5% 0,1W	3633	4822 051 20153	15K 5% 0,1W
3224	4822 051 20334	330K 5% 0,1W	3640	4822 051 20473	47K 5% 0,1W
3225	4822 051 20104	100K 5% 0,1W	3642	4822 051 20473	47K 5% 0,1W
3226	4822 051 20474	470K 5% 0,1W	3643	4822 051 20474	470K 5% 0,1W
3227	4822 051 20153	15K 5% 0,1W	3644	4822 051 20473	47K 5% 0,1W
3228	4822 051 20103	10K 5% 0,1W	3645	4822 051 20183	18K 5% 0,1W
3229	4822 051 20475	4M70 5% 0,1W	3648	4822 051 20183	18K 5% 0,1W
3252	4822 051 20681	680Ω 5% 0,1W	3650	4822 051 20271	270Ω 5% 0,1W
3253	4822 051 20681	680Ω 5% 0,1W	3651	4822 051 20104	100K 5% 0,1W
3254	4822 051 20474	470K 5% 0,1W	3653	4822 051 20473	47K 5% 0,1W
3255	4822 051 20474	470K 5% 0,1W	3654	4822 051 20473	47K 5% 0,1W
3256	4822 051 20473	47K 5% 0,1W	3655	4822 051 20153	15K 5% 0,1W
3257	4822 051 20473	47K 5% 0,1W	3661	4822 051 20103	10K 5% 0,1W
3258	4822 051 20333	33K 5% 0,1W	3662	4822 051 20103	10K 5% 0,1W
3259	4822 051 20333	33K 5% 0,1W	3667	4822 051 20109	10Ω 5% 0,1W
3260	5322 100 11541	2K2 30%lin 0,1W	3668	4822 051 20109	10Ω 5% 0,1W
3261	5322 100 11541	2K2 30%lin 0,1W	3670	4822 051 20473	47K 5% 0,1W
3262	4822 051 20473	47K 5% 0,1W	3673	4822 051 20334	330K 5% 0,1W
3263	4822 051 20473	47K 5% 0,1W	3674	4822 051 20334	330K 5% 0,1W
3275	4822 051 10183	18K 2% 0,25W	3700	4822 051 20222	2K20 5% 0,1W
3276	4822 051 20223	22K 5% 0,1W	3702	4822 051 20472	4K70 5% 0,1W
3277	4822 051 20223	22K 5% 0,1W	3703	4822 051 20183	18K 5% 0,1W
3370	4822 051 20104	100K 5% 0,1W	3705	4822 051 20153	15K 5% 0,1W
3371	4822 051 20104	100K 5% 0,1W	3728	4822 051 20334	330K 5% 0,1W
3501	4822 051 20153	15K 5% 0,1W	3750	4822 051 20109	10Ω 5% 0,1W
3502	4822 051 20153	15K 5% 0,1W	3830	4822 051 20153	15K 5% 0,1W
3503	4822 051 20183	18K 5% 0,1W	3831	4822 051 20332	3K30 5% 0,1W
3504	4822 051 20183	18K 5% 0,1W	3832	4822 051 20103	10K 5% 0,1W

22DC710/26

- - -			- + +		
3833	4822 051 20183	18K 5% 0,1W	6603	4822 130 34499	BZX79-C20
3852	4822 051 20153	15K 5% 0,1W	6604	5322 130 80214	BAS28
3853	4822 051 20562	5K60 5% 0,1W	6607	5322 130 30684	1N4002
3854	4822 051 20184	180K 5% 0,1W	6631	4822 130 34174	BZX79-C4V7
3854	4822 116 52252	180K 5% 0,5W	6640	5322 130 31928	BAS16
3856	4822 116 80176	1E 5% 0,5W	6671	4822 130 30621	1N4148
3860	4822 051 20102	1K 5% 0,1W	6823	5322 130 80214	BAS28
3861	4822 051 20102	1K 5% 0,1W	6824	5322 130 80214	BAS28
3862	4822 051 20102	1K 5% 0,1W	6830	4822 130 30861	BZX79-C7V5
3863	4822 051 20102	1K 5% 0,1W	6880	4822 130 83161	LED GREEN
3864	4822 051 20102	1K 5% 0,1W	6881	4822 130 83161	LED GREEN
3865	4822 051 20102	1K 5% 0,1W	6882	4822 130 83161	LED GREEN
3866	4822 051 20102	1K 5% 0,1W	6883	4822 130 83161	LED GREEN
3870	4822 051 20472	4K70 5% 0,1W	6884	4822 130 83161	LED GREEN
3871	4822 051 20472	4K70 5% 0,1W	6885	4822 130 83161	LED GREEN
3872	4822 051 20472	4K70 5% 0,1W	6886	4822 130 83161	LED GREEN
3873	4822 051 20472	4K70 5% 0,1W	6887	4822 130 83161	LED GREEN
3874	4822 051 20824	820K 5% 0,1W	6888	4822 130 83161	LED GREEN
3875	4822 051 20824	820K 5% 0,1W	6889	4822 130 83161	LED GREEN
4640	4822 117 10287	R05	6890	4822 130 83161	LED GREEN
4652	4822 117 10287	R05	6891	4822 130 83161	LED GREEN
4700	4822 117 10287	R05			
4860	4822 117 10287	R05			
- - - - -			- - - - -		
5050	4822 152 20677	10µH	7050	4822 209 72247	TEA6200/V2
5051	4822 152 20677	10µH	7052	5322 130 60508	BC857B
5052	4822 157 60122	4,7µH	7150	4822 209 73507	TEA6100/N3
5053	4822 152 20677	10µH	7152	4822 130 60511	BC847B
5054	4822 157 50975	1 mH	7180	4822 209 30858	TSA6057/C1
5055	4822 152 20682	Adj ind 6,15µH	7200	4822 130 60511	BC847B
5056	4822 152 20678	33µH	7202	5322 130 60508	BC857B
5057	4822 152 20683	Adj ind 28µH	7210	4822 209 30859	TDA1591/V3
5058	4822 157 52983	22µH	7211	4822 130 63087	BF545 A
5059	4822 157 52983	22µH	7212	4822 130 60511	BC847B
5070	4822 242 72076	10,7MHz	7213	4822 130 60511	BC847B
5071	4822 242 72076	10,7MHz	7214	4822 130 60511	BC847B
5072	4822 242 71883	SFE10,7MS318-D	7250	4822 209 63939	TA7705F
5073	4822 242 71883	SFE10,7MS318-D	7275	4822 209 30856	HA12134F
5117	4822 242 80368	SFE10,7MS2W4-A	7370	4822 209 10263	HEF4052BP
5150	4822 156 11081	Adj ind 1,47µH	7520	4822 209 31979	TEA6330T/V1
5180	4822 157 50975	1 mH	7550	4822 209 72894	TDA1516BQ/N2
5190	4822 242 71874	4MHz	7551	4822 209 72894	TDA1516BQ/N2
5200	4822 242 81117	CSB456F11	7552	5322 130 41982	BC848B
5570	4822 157 63285	Filter coil assy	7600	4822 209 31978	TDA3602/N1
5650	4822 242 81118	CSA11,5MTS1	7601	4822 130 62651	ON4414
5700	4822 242 80259	LN-G8-311(TPR11)	7602	5322 130 60508	BC857B
5762	4822 242 81118	CSA11,5MTS1	7603	4822 130 60511	BC847B
			7610	4822 130 60511	BC847B
			7631	5322 130 60508	BC857B
6002	4822 252 60125	DSP201	7640	4822 130 60511	BC847B
6051	4822 130 82596	BB419	7641	5322 130 60508	BC857B
6100	4822 130 30621	1N4148	7650	4822 209 31983	83C528FFB/015
6150	5322 130 31928	BAS16	7651	5322 209 11306	HEF4094BT
6201	5322 130 31928	BAS16	7652	5322 209 11306	HEF4094BT
6220	5322 130 31928	BAS16	7702	4822 130 60511	BC847B
6520	4822 130 30621	1N4148	7703	5322 130 60508	BC857B
6570	5322 130 30684	1N4002	7720	4822 209 83159	LA2000
6601	4822 130 30594	BAV10	7750	4822 900 10393	EEPROM SEC CODE
6602	5322 130 80214	BAS28	7751	4822 209 31982	P83CE654FFB/501
			7752	5322 209 60424	PC74HC573T
			7753	4822 209 31163	FCF1C65LL-85T

22DC710/26



7754	4822 209 31981	SAA6579T
7830	4822 209 73423	TLC549IP
7831	5322 130 60508	BC857B
7850	5322 209 11129	PCF8576T
7870	5322 209 14476	HEF4011BT

Technician's remarks

22DC710/26

Service  
Service  
Service

22DC710/60

22DC710/60E

22DC710/61

22DC710/64S

22 DC 710/65

Supplement

For repair information of the Cassette deck see Service Manual N° 4822.725.24071 of Auto Cassette Deck P6-25/2

# Service Manual

12 V 

From week 93 36, FD 02 become FD03 for 22 DC 710 / 26 .

From week 93 36, FD 01 become FD02 for 22 DC 710 / 60 .. / 60 E .. / 61 .

From week 93 36, FD 00 become FD01 for 22 DC 710 / 64 S .

#### Reason :

- Various improvements since starting of production .
- Suppression of short waves .
- Printed Wiring Board has been changed for new technology .

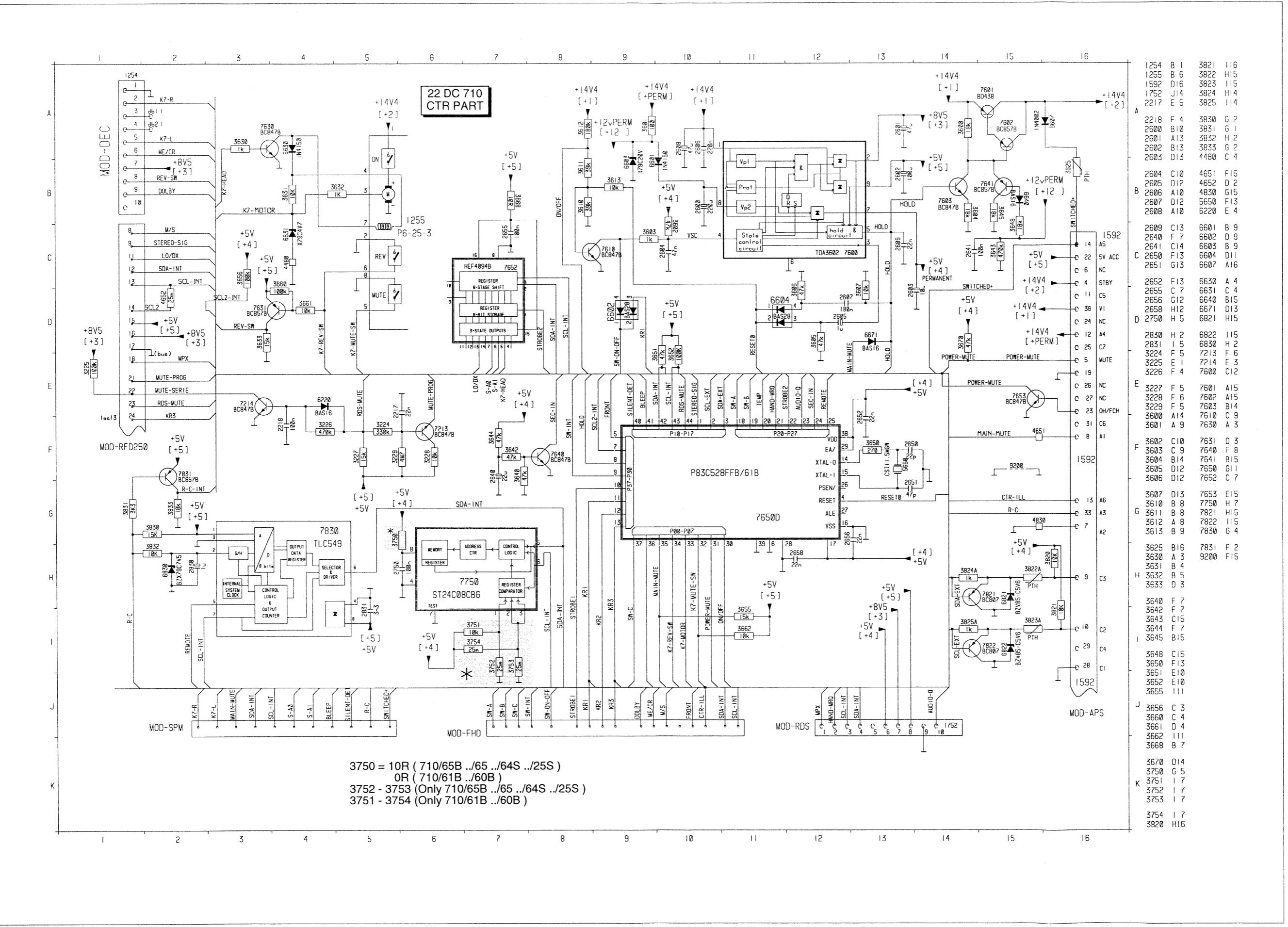
#### Consequences :

- new PCB wiring diagram.
- Updated schematic diagrams.
- new electrical parts-list.

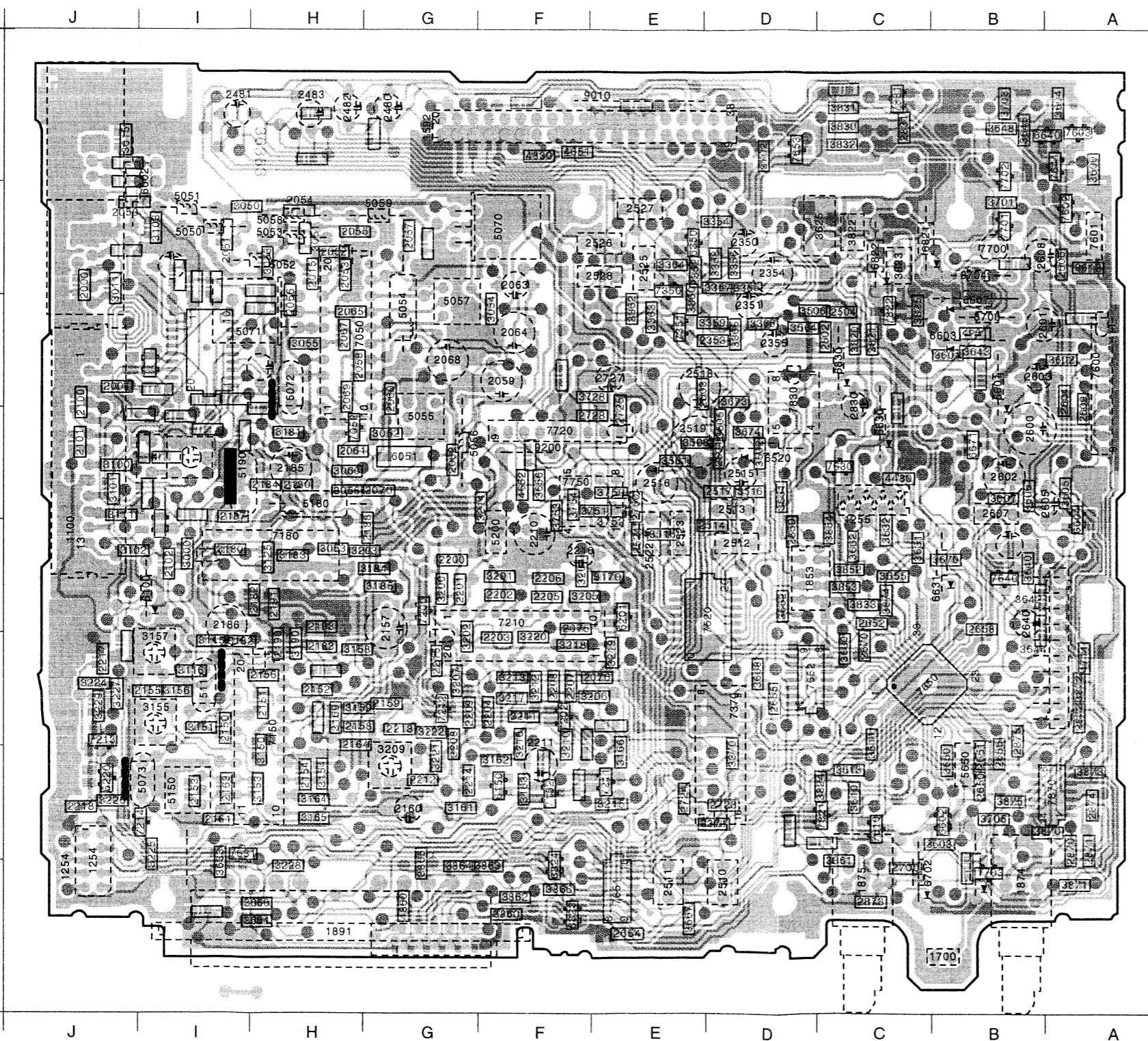
Contents	page
Technician's remarks	-2
CTR schematic diagram	-3-3a
Main panel PCB layout	-4-4a
SPM schematic diagram	-5-5a
FHD schematic diagram	-6-6a
Electrical parts-list	-7-7a, 8-8a, 9-10

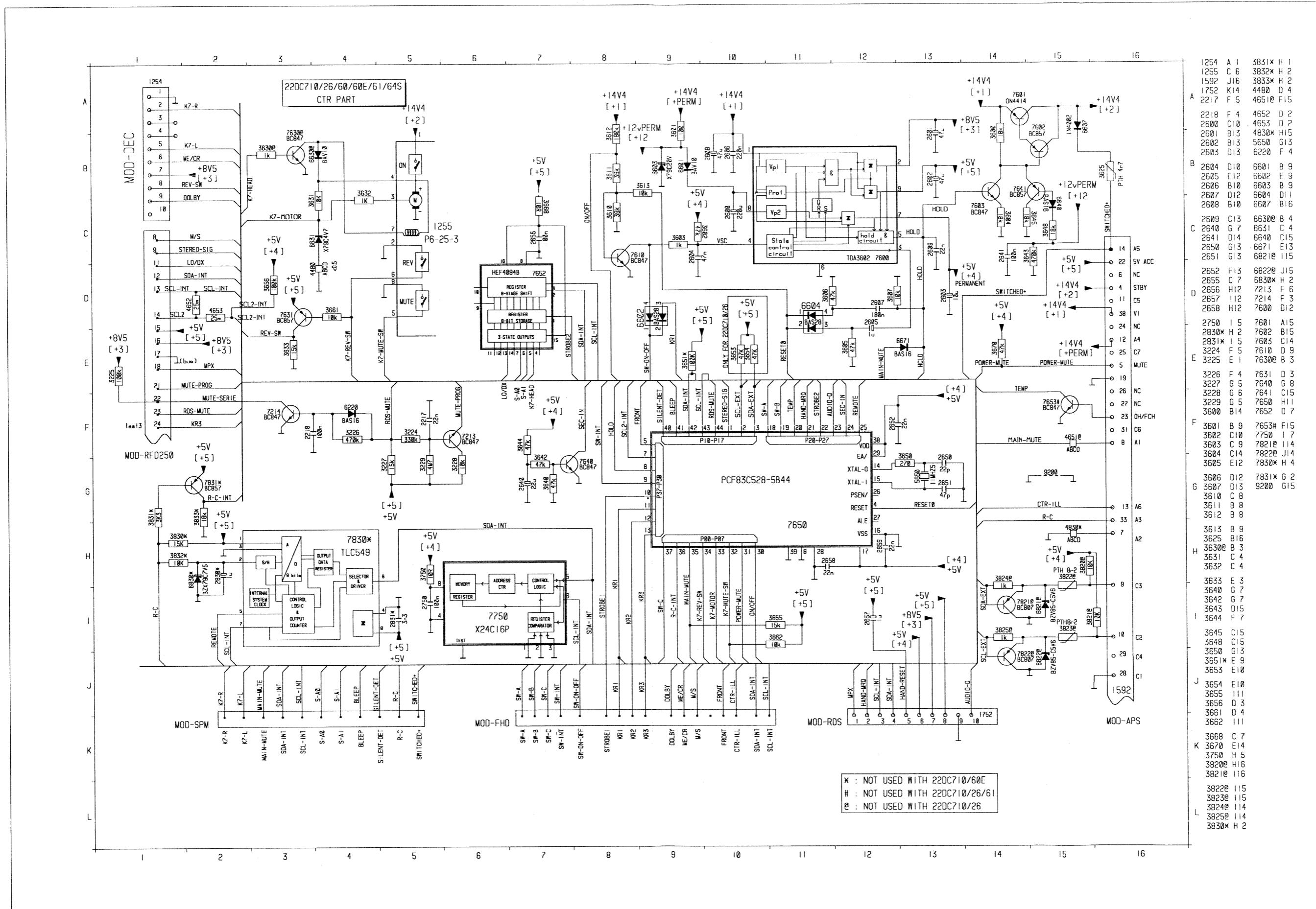


Technician's remarks



1100 J 5	2059 F 6	2211 F 2	2483 H 8	2522 E 4	2603 B 6	3209 G 2	5053 H 7	5072 H 6	6100 I 4	6822 C 7	7700 B 7
1254 J 2	2063 F 7	2216 F 4	2510 D 1	2523 E 4	2605 A 5	3625 C 7	5054 G 6	5073 I 2	6520 D 5	6830 C 6	7720 F 5
1255 C 5	2064 F 6	2350 D 7	2511 E 1	2525 E 7	2607 B 5	3700 B 6	5055 G 5	5117 I 3	6601 B 6	7050 H 6	7750 E 5
1592 G 8	2068 G 6	2351 D 6	2512 D 4	2526 E 7	2608 B 7	3704 B 7	5056 G 5	5150 I 2	6603 B 6	7150 H 3	7830 D 6
1700 B 1	2157 G 4	2354 D 7	2513 D 5	2527 E 7	2640 B 4	3822 C 7	5057 G 6	5180 H 5	6607 B 6	7180 H 4	9010 E 8
1853 D 4	2160 G 2	2355 D 6	2515 D 5	2528 E 7	2727 E 6	3823 C 7	5058 H 7	5190 I 5	6630 C 5	7210 F 3	9200 F 5
1874 B 1	2185 H 5	2480 G 8	2516 E 5	2600 B 5	2830 C 6	5050 I 7	5059 G 7	5200 F 4	6631 B 4	7370 D 2	
1875 C 1	2186 I 4	2481 I 8	2518 E 6	2601 B 6	3155 I 3	5051 I 7	5070 F 7	5650 B 2	6702 C 1	7600 A 6	
1891 H 1	2210 F 4	2482 H 8	2519 E 5	2602 B 5	3157 I 3	5052 H 7	5071 H 6	6002 J 7	6821 C 7	7601 A 7	





## MAIN PANEL

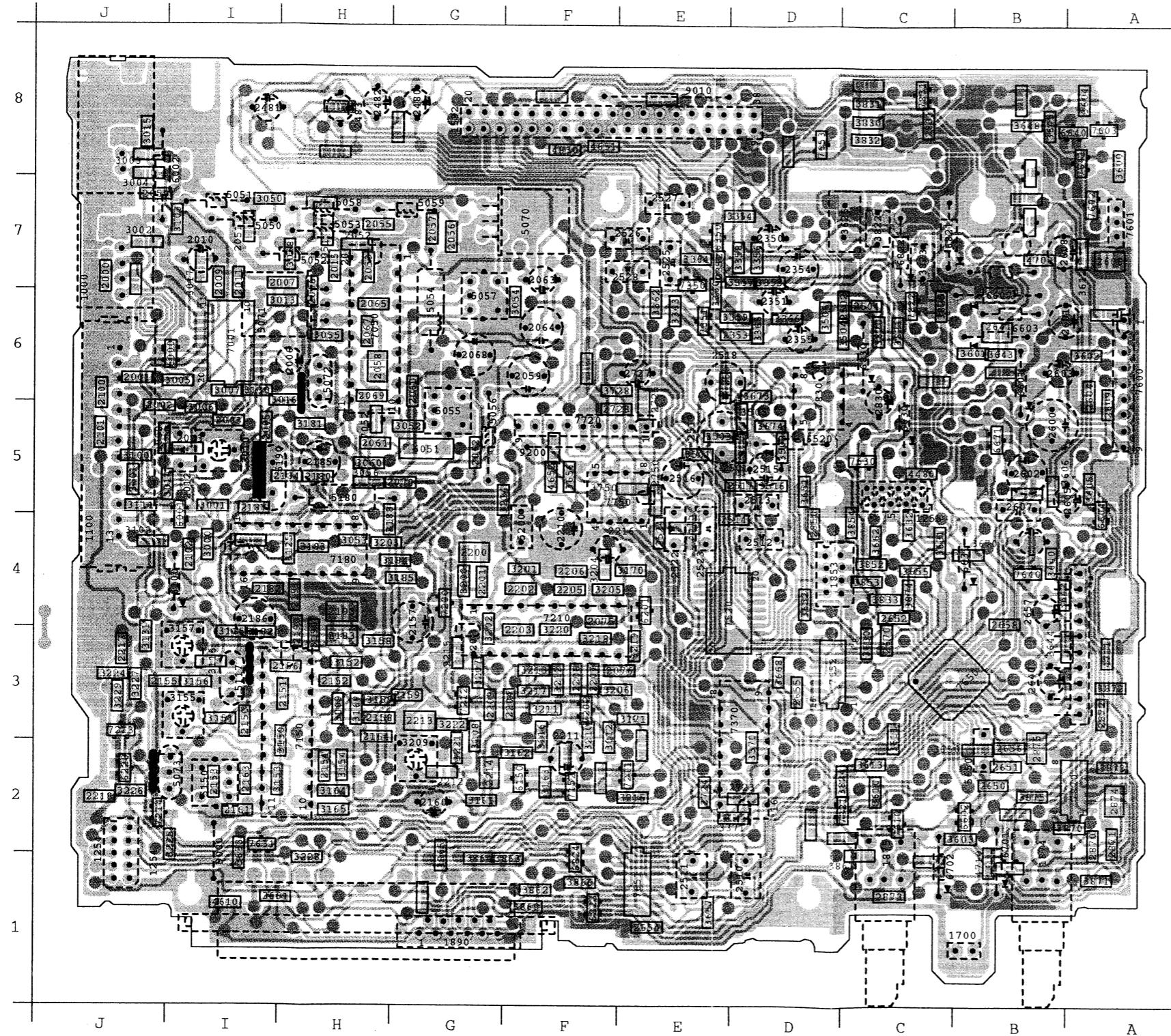
DC 710 / 26

" / 60

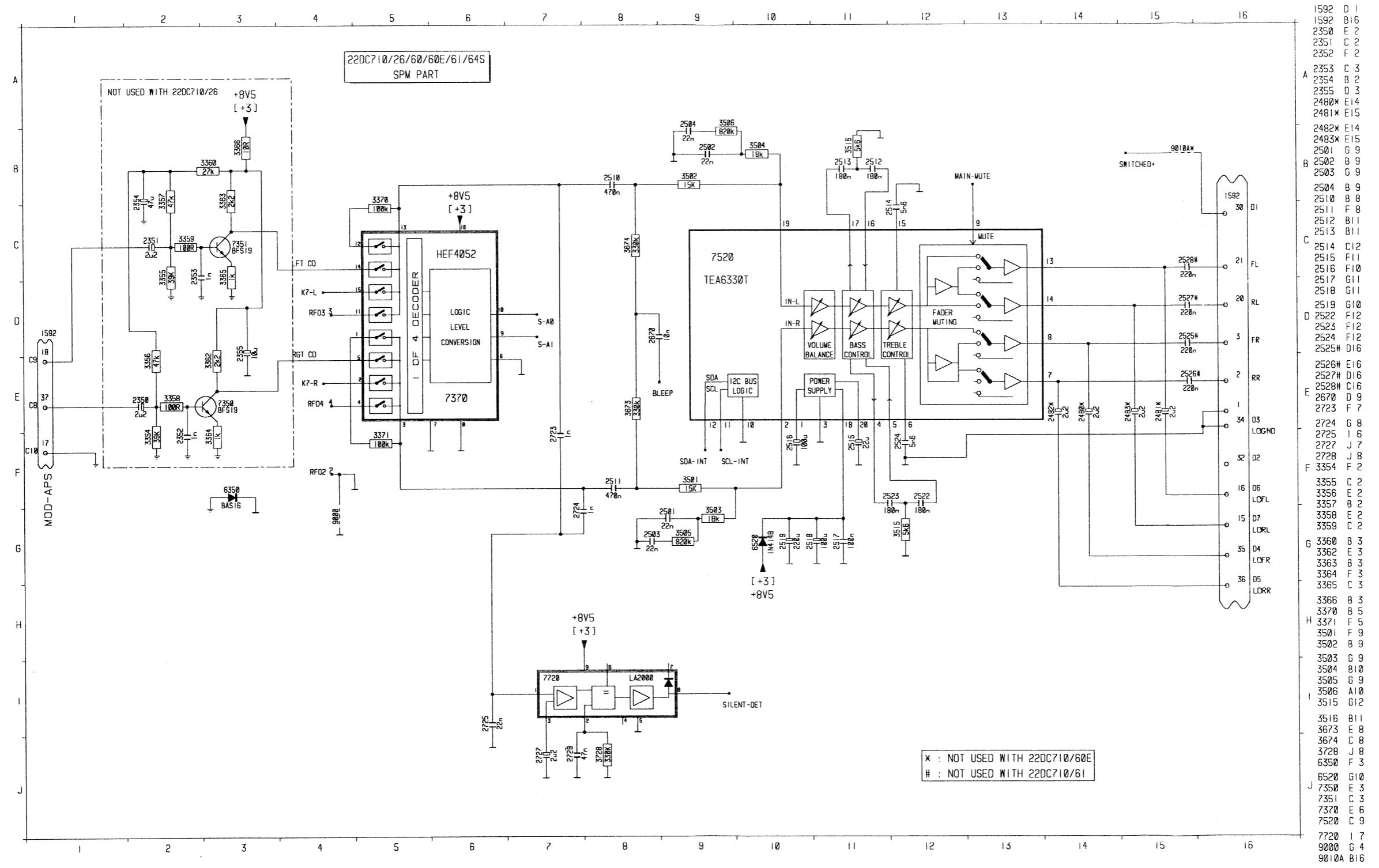
" / 60E

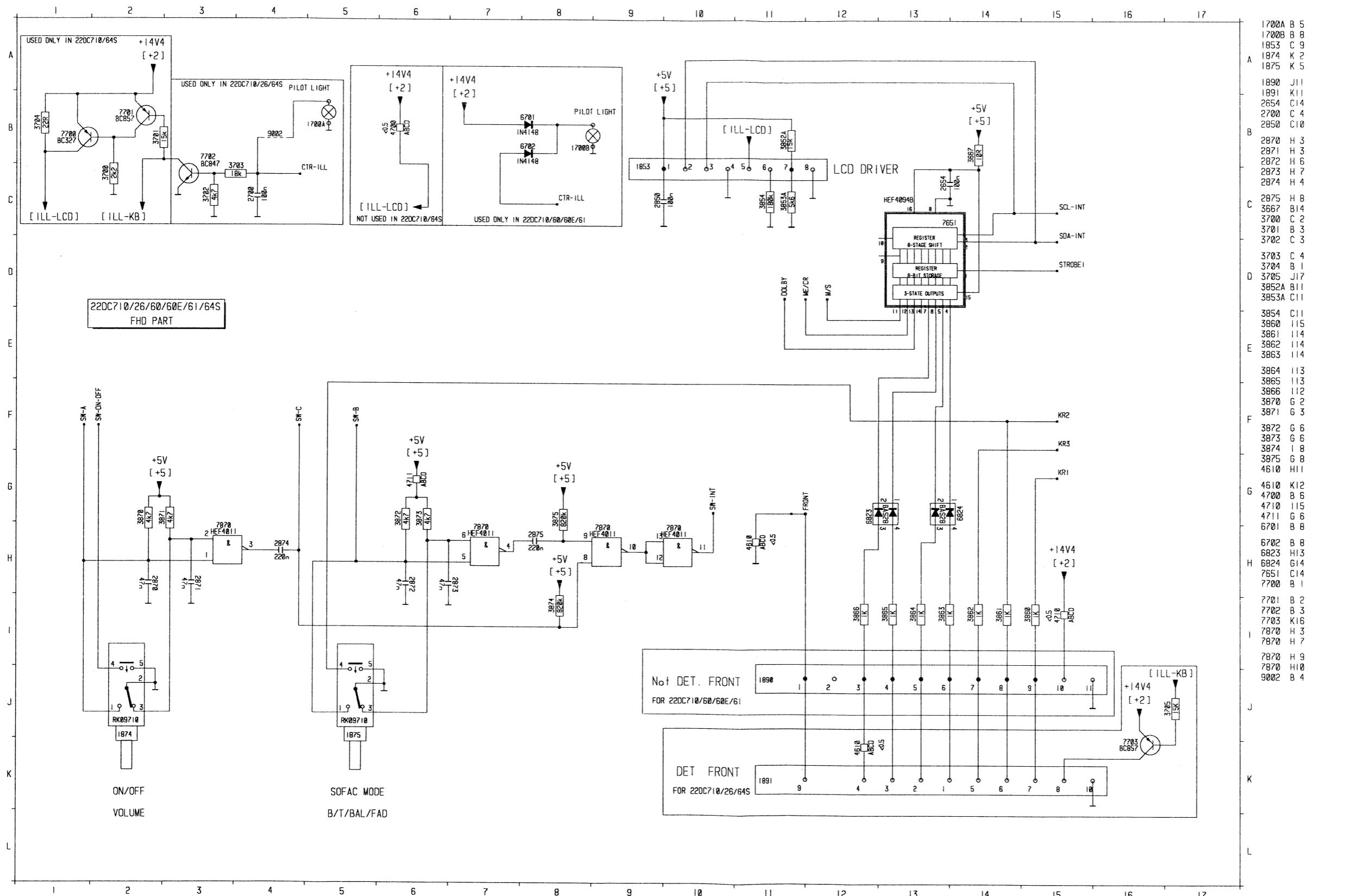
" / 61

" / 64S



2006 H 6	2185 H 5	2480 G 8	2516 E 5	2600 B 5	2727 E 6	5051 I 7	6100 I 4	6821 C 7	1255 C 5	3157 I 3	5650 B 2	7750 E 5	2210 F 4	2482 H 8	2519 E 5	2601 B 6	2830 C 6	5052 H 7	6520 D 5	6822 C 7	1592 G 8	3209 G 2	7050 H 6	7830 D 6
2010 I 7	2186 I 4	2481 I 8	2518 E 6	2601 B 6	2830 C 6	5052 H 7	6520 D 5	6822 C 7	1592 G 8	3209 G 2	7050 H 6	7830 D 6	2212 F 4	2483 H 8	2519 E 5	2602 B 5	3625 C 7	5053 H 7	6601 B 6	6830 C 6	1700 B 1	5055 G 5	7150 H 3	2012 F 4
2012 I 5	2210 F 4	2482 H 8	2519 E 5	2602 B 5	3625 C 7	5053 H 7	6601 B 6	6830 C 6	1700 B 1	5055 G 5	7150 H 3	2013 F 6	2211 F 2	2483 H 8	2522 E 4	2603 B 6	3822 C 7	5054 G 6	6603 B 6	9000 I 2	1853 D 4	5057 G 6	7180 H 4	
2014 F 5	2216 F 4	2510 D 1	2523 E 4	2605 A 5	3823 C 7	5056 G 5	6607 B 6	9010 E 8	1874 B 1	5070 F 7	7210 F 3	2015 F 7	2216 F 4	2510 D 1	2523 E 4	2605 A 5	3823 C 7	5056 G 5	6607 B 6	9010 E 8	1874 B 1	5070 F 7	7210 F 3	
2016 F 6	2350 D 7	2511 E 1	2525 E 7	2607 B 5	5072 H 6	5058 H 7	6630 C 5	9200 F 5	1875 C 1	5071 H 6	7370 D 2	2017 F 6	2351 D 6	2512 D 4	2526 E 7	2608 B 7	5073 I 2	5059 G 7	6631 B 4	1000 J 7	1890 G 1	5117 I 3	7600 A 6	
2018 G 6	2352 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2019 G 6	2353 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2020 H 7	2354 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2021 H 7	2355 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2022 I 7	2356 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2023 H 7	2357 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2024 I 7	2358 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2025 H 7	2359 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2026 I 7	2360 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2027 H 7	2361 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2028 I 7	2362 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2029 H 7	2363 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2030 I 7	2364 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2031 H 7	2365 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2032 I 7	2366 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2033 H 7	2367 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2034 I 7	2368 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2035 H 7	2369 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2036 I 7	2370 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2037 H 7	2371 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2038 I 7	2372 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2039 H 7	2373 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2040 I 7	2374 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2041 H 7	2375 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2042 I 7	2376 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2043 H 7	2377 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2044 I 7	2378 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2045 H 7	2379 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2046 I 7	2380 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2047 H 7	2381 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7	6702 C 1	1254 J 2	3155 I 3	5200 F 4	7720 F 5	
2048 I 7	2382 D 7	2513 D 5	2527 E 7	2640 B 3	5190 I 5	5180 H 5	6701 B 1	1100 J 5	3010 I 5	5150 I 2	7601 A 7	2049 H 7	2383 D 6	2515 D 5	2528 E 7	2657 B 4	5050 I 7	6002 J 7						





3006	4822 051 20101	100Ω 5% 0,1W		3201	4822 051 20104	100K 5% 0,1W
3007	4822 051 20101	100Ω 5% 0,1W		3202	4822 051 20222	2K20 5% 0,1W
3008	4822 051 20332	3K3 5% 0,1W		3203	4822 051 20474	470K 5% 0,1W
3009	4822 051 20008	0Ω JUMP. (0805)		3204	4822 051 20824	820K 5% 0,1W
3010	4822 100 20166	10K 30% LIN		3205	4822 051 20393	39K 5% 0,1W
3011	4822 051 20008	0Ω JUMP. (0805)		3206	4822 051 20393	39K 5% 0,1W
3012	4822 051 20008	0Ω JUMP. (0805)		3207	4822 051 20474	470K 5% 0,1W
3013	4822 051 20474	470K 5% 0,1W		3208	4822 051 20273	27K 5% 0,1W
3014	4822 051 20823	82K 5% 0,1W		3209	4822 100 11163	100K 30%LIN 0,1W
3015	4822 051 20103	10K 5% 0,1W	..60	3210	4822 051 20471	470Ω 5% 0,1W
3015	4822 051 20008	0Ω JUMP. (0805)		3211	4822 051 20104	100K 5% 0,1W
3016	4822 051 20109	10Ω 5% 0,1W		3212	4822 051 20103	10K 5% 0,1W
3017	4822 051 20393	39K 5% 0,1W		3213	4822 051 20681	680Ω 5% 0,1W
3050	4822 051 20561	560Ω 5% 0,1W		3214	4822 051 20109	10Ω 5% 0,1W
3051	4822 051 20471	470Ω 5% 0,1W		3215	4822 051 20475	4M70 5% 0,1W
3052	4822 051 20184	180K 5% 0,1W		3216	4822 051 20472	4K70 5% 0,1W
3053	4822 051 20472	4K70 5% 0,1W		3217	4822 051 20103	10K 5% 0,1W
3054	4822 051 20102	1K 5% 0,1W		3218	4822 051 20472	4K70 5% 0,1W
3055	4822 051 20102	1K 5% 0,1W		3219	4822 051 20472	4K7 5% 0,1W
3056	4822 051 20393	39K 5% 0,1W		3220	4822 051 20104	100K 5% 0,1W
3058	4822 051 20474	470K 5% 0,1W		3221	4822 051 20683	68K 5% 0,1W
3060	4822 051 20103	10K 5% 0,1W		3222	4822 051 20273	27K 5% 0,1W
3100	4822 051 20103	10K 5% 0,1W		3224	4822 051 20334	330K 5% 0,1W
3101	4822 051 20109	10Ω 5% 0,1W		3225	4822 051 20104	100K 5% 0,1W
3102	4822 051 20471	470Ω 5% 0,1W		3226	4822 051 20474	470K 5% 0,1W
3103	4822 051 20475	4M70 5% 0,1W		3227	4822 051 20153	15K 5% 0,1W
3111	4822 051 20569	56Ω 5% 0,1W		3228	4822 051 20103	10K 5% 0,1W
3115	4822 051 20569	56Ω 5% 0,1W		3229	4822 051 20475	4M70 5% 0,1W
3116	4822 051 20102	1K 5% 0,1W		3252	4822 051 20681	680Ω 5% 0,1W
3125	4822 051 20102	1K 5% 0,1W		3253	4822 051 20681	680Ω 5% 0,1W
3130	4822 051 20393	39K 5% 0,1W		3254	4822 051 20474	470K 5% 0,1W
3131	4822 051 20393	39K 5% 0,1W		3255	4822 051 20474	470K 5% 0,1W
3150	4822 051 20331	330Ω 5% 0,1W		3256	4822 051 20473	47K 5% 0,1W
3151	4822 051 20331	330Ω 5% 0,1W		3257	4822 051 20473	47K 5% 0,1W
3152	4822 051 20153	15K 5% 0,1W		3258	4822 051 20333	33K 5% 0,1W
3153	4822 051 20222	2K20 5% 0,1W		3259	4822 051 20333	33K 5% 0,1W
3154	4822 051 20109	10Ω 5% 0,1W		3260	5322 100 11541	2K2 30%lin 0,1W
3155	4822 100 20166	10K 30%LIN 0,1W		3261	5322 100 11541	2K2 30%lin 0,1W
3156	4822 051 20222	2K20 5% 0,1W		3262	4822 051 20473	47K 5% 0,1W
3157	4822 100 20166	10K 30%LIN 0,1W		3263	4822 051 20473	47K 5% 0,1W
3158	4822 051 20109	10Ω 5% 0,1W		3275	4822 051 10183	18K 2% 0,25W
3159	4822 051 20681	680Ω 5% 0,1W		3276	4822 051 20223	22K 5% 0,1W
3161	4822 051 20683	68K 5% 0,1W		3277	4822 051 20223	22K 5% 0,1W
3162	4822 051 20222	2K20 5% 0,1W		3354	4822 051 20393	39K 5% 0,1W
3163	4822 051 20271	270Ω 5% 0,1W		3355	4822 051 20393	39K 5% 0,1W
3164	4822 051 20103	10K 5% 0,1W		3356	4822 051 20473	47K 5% 0,1W
3164	4822 051 20273	27K 5% 0,1W		3357	4822 051 20473	47K 5% 0,1W
3165	4822 051 20102	1K 5% 0,1W		3358	4822 051 20101	100Ω 5% 0,1W
3166	4822 051 20008	0Ω JUMP. (0805)		3359	4822 051 20101	100Ω 5% 0,1W
3169	4822 051 20331	330Ω 5% 0,1W		3360	4822 051 20273	27K 5% 0,1W
3170	4822 051 20008	0Ω JUMP. (0805)		3362	4822 051 20222	2,2K 5% 0,1W
3171	4822 051 20008	0Ω JUMP. (0805)		3363	4822 051 20222	2,2K 5% 0,1W
3180	4822 051 20103	10K 5% 0,1W		3364	4822 051 20102	1K 5% 0,1W
3181	4822 051 20103	10K 5% 0,1W		3365	4822 051 20102	1K 5% 0,1W
3182	4822 051 20331	330Ω 5% 0,1W		3366	4822 051 20109	10Ω 5% 0,1W
3183	4822 051 20475	4M70 5% 0,1W		3367	4822 051 20008	0Ω JUMP. (0805)
3184	4822 051 20102	1K 5% 0,1W		3368	4822 051 20008	0Ω JUMP. (0805)
3185	4822 051 20103	10K 5% 0,1W		3370	4822 051 20104	100K 5% 0,1W
3190	4822 051 20332	3K30 5% 0,1W		3371	4822 051 20104	100K 5% 0,1W
3200	4822 051 20273	27K 5% 0,1W		3501	4822 051 20153	15K 5% 0,1W

3502	4822 051 20153	15K 5% 0,1W	3661	4822 051 20103	10K 5% 0,1W
3503	4822 051 20183	18K 5% 0,1W	3662	4822 051 20103	10K 5% 0,1W
3504	4822 051 20183	18K 5% 0,1W	3667	4822 051 20109	10Ω 5% 0,1W
3505	4822 051 20824	820K 5% 0,1W	3668	4822 051 20109	10Ω 5% 0,1W
3506	4822 051 20824	820K 5% 0,1W	3670	4822 051 20473	47K 5% 0,1W
3515	4822 051 20562	5K60 5% 0,1W	3673	4822 051 20334	330K 5% 0,1W
3516	4822 051 20562	5K60 5% 0,1W	3674	4822 051 20334	330K 5% 0,1W
3550	4822 051 20103	10K 5% 0,1W	3700	4822 051 20222	2K20 5% 0,1W (RDS)
3551	4822 051 20103	10K 5% 0,1W	3700	4822 051 20222	2K20 5% 0,1W (FHD)
3552	4822 051 20103	10K 5% 0,1W	3701	4822 051 20153	15K 5% 0,1W
3553	4822 051 20103	10K 5% 0,1W	3702	4822 051 20472	4K70 5% 0,1W
3556	4822 051 20478	4Ω70 5% 0,1W	3703	4822 051 20183	18K 5% 0,1W
3557	4822 051 20478	4Ω70 5% 0,1W	3704	4822 116 52176	10Ω 5% R25J
3558	4822 051 20478	4Ω70 5% 0,1W	3705	4822 051 20153	15K 5% 0,1W
3559	4822 051 20478	4Ω70 5% 0,1W	3728	4822 051 20334	330K 5% 0,1W
3560	4822 051 20478	4Ω70 5% 0,1W	3750	4822 051 20109	10Ω 5% 0,1W
3561	4822 051 20478	4Ω70 5% 0,1W	3820	4822 051 20103	10K 5% 0,1W
3562	4822 051 20478	4Ω70 5% 0,1W	3821	4822 051 20103	10K 5% 0,1W
3563	4822 051 20102	1K 5% 0,1W	3822	4822 116 40221	PTH60G31AR8R2MT2
3563	4822 051 20478	4Ω70 5% 0,1W	3823	4822 116 40221	PTH60G31AR8R2MT2
3564	4822 051 20682	6K80 5% 0,1W	3824	4822 051 20102	1K 5% 0,1W
3564	4822 051 20472	4K70 5% 0,1W	3825	4822 051 20102	1K 5% 0,1W
3565	4822 051 20392	3K90 5% 0,1W	3830	4822 051 20153	15K 5% 0,1W
3565	4822 051 20472	4K70 5% 0,1W	3831	4822 051 20332	3K30 5% 0,1W
3566	4822 051 20473	47K 5% 0,1W	3832	4822 051 20103	10K 5% 0,1W
3584	4822 116 40218	Posistor	3833	4822 051 20183	18K 5% 0,1W
3586	4822 051 20223	22K 5% 0,1W	3852	4822 051 20153	15K 5% 0,1W
3587	4822 051 20103	10K 5% 0,1W	3853	4822 051 20562	5K60 5% 0,1W
3588	4822 051 20103	10K 5% 0,1W	3854	4822 051 20184	180K 5% 0,1W (FHD)
3590	4822 051 20102	1K 5% 0,1W	3854	4822 116 52252	180K 5% 0,5W (LCD)
3600	4822 051 20183	18K 5% 0,1W	3855	4822 050 28201	820Ω 5%
3601	4822 051 20101	100Ω 5% 0,1W	3856	4822 116 80176	1E 5% 0,5W
3602	4822 051 20473	47K 5% 0,1W	3860	4822 051 20102	1K 5% 0,1W
3603	4822 051 20102	1K 5% 0,1W	3861	4822 051 20102	1K 5% 0,1W
3604	4822 051 20183	18K 5% 0,1W	3862	4822 051 20102	1K 5% 0,1W
3605	4822 051 20473	47K 5% 0,1W	3863	4822 051 20102	1K 5% 0,1W
3606	4822 051 20473	47K 5% 0,1W	3864	4822 051 20102	1K 5% 0,1W
3607	4822 051 20103	10K 5% 0,1W	3865	4822 051 20102	1K 5% 0,1W
3610	4822 051 20393	39K 5% 0,1W	3866	4822 051 20102	1K 5% 0,1W
3611	4822 051 20393	39K 5% 0,1W	3870	4822 051 20472	4K70 5% 0,1W
3612	4822 051 20184	180K 5% 0,1W	3871	4822 051 20472	4K70 5% 0,1W
3613	4822 051 20103	10K 5% 0,1W	3872	4822 051 20472	4K70 5% 0,1W
3625	4822 116 40216	4Ω7	3873	4822 051 20472	4K70 5% 0,1W
3630	4822 051 20102	1K 5% 0,1W	3874	4822 051 20824	820K 5% 0,1W
3631	4822 051 20103	10K 5% 0,1W	3875	4822 051 20824	820K 5% 0,1W
3632	4822 051 20102	1K 5% 0,1W	3880	4822 050 23901	390Ω 5% SFR25
3633	4822 051 20153	15K 5% 0,1W	3880	4822 116 52215	220Ω 5% R20 ..../64S
3640	4822 051 20473	47K 5% 0,1W	3881	4822 116 52215	220Ω 5% R20 ..../64S
3642	4822 051 20473	47K 5% 0,1W	3881	4822 050 23301	330Ω 5% SFR25
3643	4822 051 20474	470K 5% 0,1W	3882	4822 050 23301	330Ω 5% SFR25
3644	4822 051 20473	47K 5% 0,1W	3882	4822 116 52215	220Ω 5% R20 ..../64S
3645	4822 051 20183	18K 5% 0,1W	3884	4822 050 23901	390Ω 5% SFR25
3648	4822 051 20183	18K 5% 0,1W	4480	4822 051 20008	0Ω JUMP. (0805)
3650	4822 051 20271	270Ω 5% 0,1W	4610	4822 051 20008	0Ω JUMP. (0805)
3651	4822 051 20473	47K 5% 0,1W	4640	4822 051 20008	0Ω JUMP. (0805)
3652	4822 051 20104	100K 5% 0,1W	4651	4822 051 20008	0Ω JUMP. (0805)
3653	4822 051 20473	47K 5% 0,1W	4652	4822 051 20008	0Ω JUMP. (0805)
3654	4822 051 20473	47K 5% 0,1W	4710	4822 051 20008	0Ω JUMP. (0805)
3655	4822 051 20153	15K 5% 0,1W	4700	4822 051 20008	0Ω JUMP. (0805)
3656	4822 051 20104	100K 5% 0,1W	4860	4822 051 20008	0Ω JUMP. (0805)

Miscellaneous			II		
1100	4822 210 10305		2150	4822 122 33496	100nF 10% X7R 63V
1850	4822 267 60238	19 PINS	2151	4822 122 32542	47nF 10% X7R 63V
1851	4822 267 60238	19 PINS	2152	4822 122 32542	47nF 10% X7R 63V
1860	4822 276 13103	TACT SWITCH	2153	4822 122 33515	82pF 5% NP0 63V
1861	4822 276 13103	TACT SWITCH	2154	5322 122 32654	22nF 10% X7R 63V
1862	4822 276 13103	TACT SWITCH	2155	4822 122 33496	100nF 10% X7R 63V
1863	4822 276 13103	TACT SWITCH	2156	4822 122 32542	47nF 10% X7R 63V
1864	4822 276 13103	TACT SWITCH	2157	4822 124 23624	47μF 20% 16V
1865	4822 276 13103	TACT SWITCH	2158	5322 126 10223	4,7nF 10% X7R 63V
1866	4822 276 13103	TACT SWITCH	2159	5322 126 10223	4,7nF 10% X7R 63V
1867	4822 276 13103	TACT SWITCH	2160	4822 124 40244	2,2μF 20% 63V
1868	4822 276 13103	TACT SWITCH	2161	4822 122 33181	150pF 5% NP0 50V
1869	4822 276 13103	TACT SWITCH	2163	4822 122 33514	68pF 5% NP0 50V
1870	4822 276 13103	TACT SWITCH	2164	4822 122 32627	2,7nF 10% X7R 50V
1871	4822 276 13103	TACT SWITCH	2180	5322 122 32654	22nF 10% X7R 63V
1874	4822 273 10261		2182	4822 122 32891	68nF 10% X7R 63V
1875	4822 273 10261		2183	4822 122 32916	220nF 10% X7R 63V
			2184	5322 122 32654	22nF 10% X7R 63V
			2185	4822 124 23624	47μF 20% 16V
2000	4822 051 20008	0Ω JUMP. (0805)			
2000	5322 122 32654	22nF 10% X7R	/60	2186	4822 124 23624
2001	4822 051 20008	0Ω JUMP. (0805)		2187	5322 122 32659
2001	5322 122 32268	470 pF 5% NP0	/60	2188	5322 122 32654
2002	4822 122 33891	3,3nF 10% X7R		2190	4822 122 32542
				2191	4822 122 32597
2003	4822 122 33891	3,3nF 10% X7R		2193	4822 122 32916
2005	5322 122 32654	22nF 10% X7R		2200	4822 122 32916
2006	4822 124 41969	1μF 20% 50V		2201	5322 122 32654
2007	5322 122 32654	22nF 10% X7R		2202	4822 122 33496
2009	4822 122 33496	100nF 10% X7R		2203	4822 122 31768
				2204	5322 122 32268
2010	4822 124 41969	1μF 20% 50V		2205	5322 122 32268
2011	4822 122 32542	47nF 10% 63V		2206	5322 122 32654
2012	5322 121 42661	330nF 10% 63V		2207	5322 122 31866
2013	4822 122 33891	3,3nF 10% X7R		2208	4822 122 33128
2015	5322 122 34098	10nF 10% X7R 63V			15nF 10% X7R .. /60/60E
2050	4822 122 32597	6,8nF 10% X7R 63V		2208	5322 122 31866
2051	5322 122 32287	4,7pF 5% NP0 50V		2208	4822 122 33128
2052	5322 122 32448	10pF 5% 50V		2209	4822 122 33496
2053	5322 122 32659	33pF 5% 50V		2210	4822 124 23624
2054	4822 122 33514	68pF 5% NP0 50V		2211	4822 124 41796
				2212	4822 122 31766
2055	4822 122 33216	270pF 5%		2213	4822 122 32916
2056	4822 122 33216	270pF 5%		2214	4822 122 32916
2057	5322 122 34098	10nF 10% X7R 63V		2215	4822 122 33216
2058	4822 122 32916	220nF 10% X7R 63V		2216	4822 124 41972
2059	4822 124 23624	47μF 20% 16V			4,7μF 20% 50V
				2217	4822 122 31797
2060	4822 122 33216	270pF 5% NP0 50V		2218	4822 122 33496
2061	5322 122 32654	22nF 10% X7R 63V		2250	5322 126 10794
2062	4822 122 33216	270pF 5% NP0 50V		2251	5322 126 10794
2063	4822 124 41969	1μF 20% 50V		2252	5322 126 10794
2064	4822 124 23624	47μF 20% 16V			220pF 10%
				2253	5322 126 10794
2065	4822 122 33496	100nF 10% X7R 63V		2254	4822 122 32646
2066	5322 122 32658	22pF 5% 50V		2255	4822 122 32646
2067	4822 122 33496	100nF 10% X7R 63V		2256	4822 124 40272
2068	4822 124 23624	47μF 20% 16V		2257	4822 124 40272
2069	5322 122 34098	10nF 10% X7R 63V			33μF 20% 16V
				2258	4822 124 40272
2070	5322 122 32654	22nF 10% X7R 63V		2259	4822 124 22403
2075	4822 122 33496	100nF 10% X7R 63V		2265	4822 124 23432
2076	4822 122 33496	100nF 10% X7R 63V		2266	5322 122 32654
2100	5322 122 32654	22nF 10% X7R 63V		2275	4822 121 42408
2101	5322 122 34098	10nF 10% X7R 63V		2276	4822 121 42408
2102	5322 122 34098	10nF 10% X7R 63V			220nF 5% 63V

2277	4822 124 41969	1μF 20% 50V	2600	4822 124 21519
2278	4822 121 42408	220nF 5% 63V	2601	4822 124 40433
2279	4822 121 42408	220nF 5% 63V	2602	4822 124 22711
2350	4822 124 40244	2,2μF 20% 50V	2603	4822 124 40248
2351	4822 124 40244	2,2μF 20% 50V	2604	4822 122 32542
2352	5322 122 34123	1nF 10% X7R	2605	4822 124 41969
2353	5322 122 34123	1nF 10% X7R	2606	4822 122 32916
2354	4822 124 23624	47μF 20% 16V	2607	4822 121 51356
2355	4822 124 22403	10μF 20% 16V	2608	4822 124 40433
2480	5322 124 41379	2,2μF 20% 50V	2609	5322 122 32654
2481	5322 124 41379	2,2μF 20% 50V	2640	4822 124 41796
2482	5322 124 41379	2,2μF 20% 50V	2641	4822 122 33496
2483	5322 124 41379	2,2μF 20% 50V	2650	5322 122 32658
2501	5322 122 32654	22nF 10% X7R 63V	2651	5322 122 32452
2502	5322 122 32654	22nF 10% X7R 63V	2652	5322 122 32654
2503	5322 122 32654	22nF 10% X7R 63V	2654	4822 122 33496
2504	5322 122 32654	22nF 10% X7R 63V	2655	4822 122 33496
2510	4822 121 51252	470nF 10%	2656	5322 122 32654
2511	4822 121 51252	470nF 10%	2657	4822 124 41969
2512	4822 121 51356	180nF 10% 63V	2658	5322 122 32654
2513	4822 121 51356	180nF 10% 63V	2670	5322 122 34098
2514	4822 122 32646	5,6nF 10% X7R 50V	2700	4822 122 33496
2515	4822 124 41796	22μF 20% 16V	2700	4822 122 33515
2516	4822 124 23432	100μF 20% 10V	2701	4822 122 33496
2517	4822 122 33496	100nF 10% X7R 63V	2702	4822 124 40244
2518	4822 124 23432	100μF 20% 10V	2703	4822 126 10333
2519	4822 124 23768	220μF 20% 10V	2704	5322 122 32452
2522	4822 121 51356	180nF 10% 63V	2705	4822 122 33515
2523	4822 121 51356	180nF 10% 63V	2723	5322 122 34123
2524	4822 122 32646	5,6nF 10% X7R 50V	2724	5322 122 34123
2525	4822 121 42408	220nF 5% 63V	2725	5322 122 32654
2526	4822 121 42408	220nF 5% 63V	2727	4822 124 40244
2527	4822 121 42408	220nF 5% 63V	2728	4822 122 32542
2528	4822 121 42408	220nF 5% 63V	2750	4822 122 33496
2550	5322 122 32268	470pF 10% 50V	2752	4822 122 33496
2551	5322 122 32268	470pF 10% 50V	2753	4822 122 33496
2552	5322 122 32268	470pF 10% 50V	2759	4822 122 33496
2553	5322 122 32268	470pF 10% 50V	2760	4822 122 33496
2554	4822 122 33496	100nF 10% X7R 63V	2765	5322 122 32659
2555	4822 122 33496	100nF 10% X7R 63V	2766	5322 122 32659
2556	5322 126 10223	4,7nF 10% X7R 63V	2830	4822 124 41969
2557	5322 126 10223	4,7nF 10% X7R 63V	2831	4822 122 33891
2558	5322 126 10223	4,7nF 10% X7R 63V	2850	4822 122 33496
2559	5322 126 10223	4,7nF 10% X7R 63V	2851	4822 124 41009
2560	5322 126 10223	4,7nF 10% X7R 63V	2870	4822 122 32542
2561	5322 126 10223	4,7nF 10% X7R 63V	2871	4822 122 32542
2562	5322 126 10223	4,7nF 10% X7R 63V	2872	4822 122 32542
2563	5322 126 10223	4,7nF 10% X7R 63V	2873	4822 122 32542
2564	4822 124 22711	100μF 20% 10V	2874	4822 122 32916
2564	4822 126 12783	100nF 10% 25V	2875	4822 122 32916
2570	4822 124 40201	1000μF 20% 16V		
2571	4822 124 40201	1000μF 20% 16V		
2572	4822 124 40201	1000μF 20% 16V		
2573	4822 124 40201	1000μF 20% 16V		
2574	5322 122 32654	22nF 10% X7R 63V	3000	4822 051 20008
2587	5322 122 32531	100pF 5% NP0 50V	3000	4822 051 20102
2587	4822 122 33581	150pF 5%	3001	4822 051 20102
2588	5322 122 32531	100pF 5% NP0 50V	3002	4822 051 20102
2588	4822 122 33581	150pF 5%	3003	4822 051 20102
2589	5322 122 34098	10nF 10% X7R 63V	3004	4822 051 20102
			3005	4822 051 20101

~~~~~			~~~~~		
5050	4822 152 20677	10MUH	6823	5322 130 80214	BAS28
5051	4822 152 20677	10MUH	6824	5322 130 80214	BAS28
5052	4822 157 60122		6830	4822 130 30861	BZX79-C7V5
5053	4822 152 20677	10MUH TILL 9336	6880	4822 130 83161	LED GREEN ..../26 ..../64S
5054	4822 157 50975	1 MH	6880	4822 130 82595	LED ORANGE ..../60 ..../60E
5055	4822 152 20682		6880	4822 130 83118	LED GREEN ..../61
5056	4822 152 20678	33UH	6881	4822 130 83161	LED GREEN ..../26 ..../64S
5057	4822 152 20683		6881	4822 130 82595	LED ORANGE ..../60 ..../60E
5058	4822 152 20678	33 UH	6881	4822 130 83118	LED GREEN ..../61
5058	4822 157 52983	22UH 10%	6882	4822 130 83161	LED GREEN
5059	4822 152 20679	68 UH	6882	4822 130 82595	LED ORANGE ..../60 ..../60E
5059	4822 157 52983	22UH 10%	6882	4822 130 83118	LED GREEN ..../61
5070	4822 242 72076	10,700 000MC	6883	4822 130 83161	LED GREEN ..../26 ..../64S
5071	4822 242 72076	10,700 000MC	6883	4822 130 82595	LED ORANGE ..../60 ..../60E
5072	4822 242 71883	SFE10,7MS318-D	6883	4822 130 83118	LED GREEN ..../61
5073	4822 242 71883	SFE10,7MS318-D	6884	4822 130 83161	LED GREEN ..../26 ..../64S
5117	4822 242 80368	SFE10,7MS2W4-A	6884	4822 130 82595	LED ORANGE ..../60 ..../60E
5150	4822 156 11081		6884	4822 130 83118	LED GREEN ..../61
5180	4822 157 50975	1 MH	6885	4822 130 83161	LED GREEN ..../26 ..../64S
5190	4822 242 71874	4,000 000 MC	6885	4822 130 82595	LED ORANGE ..../60 ..../60E
5200	4822 242 81117	CSB456F11	6885	4822 130 83118	LED GREEN ..../61
5350	4822 157 53575	3,3 UH	6886	4822 130 83161	LED GREEN ..../26 ..../64S
5354	4822 157 53575	3,3 UH	6886	4822 130 82595	LED ORANGE ..../60 ..../60E
5570	4822 157 63285	Coil assy ..../26	6886	4822 130 83118	LED GREEN ..../61
5570	4822 157 63311	Coil assy	6887	4822 130 83161	LED GREEN ..../26 ..../64S
5570	4822 157 70512	Coil assy ..../61	6887	4822 130 82595	LED ORANGE ..../60 ..../60E
5650	4822 242 81118	CSA11,5MTS1	6887	4822 130 83118	LED GREEN ..../61
5700	4822 242 80259	LN-G8-311(TPR11)	6888	4822 130 83161	LED GREEN ..../26 ..../64S
5762	4822 242 81118	CSA11,5MTS1	6888	4822 130 82595	LED ORANGE ..../60 ..../60E
			6888	4822 130 83118	LED GREEN ..../61
6000	5322 130 80214	BAS28	6889	4822 130 83161	LED GREEN ..../26 ..../64S
6001	5322 130 80214	BAS28	6889	4822 130 82595	LED ORANGE ..../60 ..../60E
6002	4822 252 60125	DSP201	6889	4822 130 83118	LED GREEN ..../61
6051	4822 130 82596	BB419	6890	4822 130 83161	LED GREEN ..../26 ..../64S
6100	4822 130 30621	1N4148	6890	4822 130 82595	LED ORANGE ..../60 ..../60E
6150	5322 130 31928	BAS16	6890	4822 130 83118	LED GREEN ..../61
6201	5322 130 31928	BAS16	6891	4822 130 83161	LED GREEN ..../26 ..../64S
6220	5322 130 31928	BAS16	6891	4822 130 82595	LED ORANGE ..../60 ..../60E
6350	5322 130 31928	BAS16	6891	4822 130 83118	LED GREEN ..../61
6350	5322 130 34955	BA482 ..../60	6890	4822 130 83118	LED GREEN ..../61
6351	5322 130 34955	BA482	6891	4822 130 83161	LED GREEN ..../26 ..../64S
6352	5322 130 34955	BA482	6891	4822 130 82595	LED ORANGE ..../60 ..../60E
6520	4822 130 30621	1N4148	6891	4822 130 83118	LED GREEN ..../61
6550	4822 130 80125	BZX84C5V6	7001	4822 209 32332	TEA6101T/N2
6570	5322 130 30684	1N4002 ..../26	7050	4822 209 72247	TEA6200/V2
6570	4822 130 82465	1.5KE27P	7052	5322 130 60508	BC857B
6590	5322 130 80214	BAS28	7150	4822 209 73507	TEA6100/N3
6601	4822 130 30594	BAV10	7152	4822 130 60511	BC847B
6602	5322 130 80214	BAS28	7180	4822 209 30858	TSA6057/C1
6603	4822 130 34499	BZX79-C20	7200	4822 130 60511	BC847B
6604	5322 130 80214	BAS28	7202	5322 130 60508	BC857B
6607	5322 130 30684	1N4002	7210	4822 209 30859	TDA1591/V3
6630	4822 130 30594	BAV10	7211	4822 130 63087	BF545 A
6631	4822 130 34174	BZX79-C4V7	7212	4822 130 60511	BC847B
6640	5322 130 31928	BAS16	7213	4822 130 60511	BC847B
6671	5322 130 31928	BAS 16	7214	4822 130 60511	BC847B
6701	4822 130 30621	1N4148	7250	4822 209 63939	TA7705F
6702	4822 130 30621	1N4148	7275	4822 209 30856	HA12134F
6821	4822 130 32904	BZX85-C5V6	7350	4822 130 42353	BFS19
6822	4822 130 32904	BZX85-C5V6	7351	4822 130 42353	BFS19
			7370	4822 209 10263	HEF4052BP
			7520	4822 209 31979	TEA6330T/V1
			7550	4822 209 72894	TDA1516BQ/N2 ..../26

22DC710/60..../60E..../61 22DC710/26 22DC710/64S

7550	4822 209 32487	TDA1553Q/N4	7702	4822 130 60511
7551	4822 209 72894	TDA1516BQ/N2 ..26	7703	5322 130 60508
7551	4822 209 32487	TDA1553Q/N4	7720	4822 209 83159
7552	5322 130 41982	BC848B	7750	4822 900 10393
7582	5322 130 41983	BC858B	7750	4822 900 10404
7600	4822 209 32687	TDA3602/N2 FROM 9326	7750	4822 900 10418
7601	4822 130 62651	ON4414	7750	4822 900 10403
7602	5322 130 60508	BC857B	7751	4822 209 32436
7603	4822 130 60511	BC847B	7752	5322 209 60424
7610	4822 130 60511	BC847B	7753	4822 209 31163
7630	4822 130 60511	BC847B	7754	4822 209 31981
7631	5322 130 60508	BC857B	7821	4822 130 60511
7640	4822 130 60511	BC847B	7822	4822 130 60511
7641	5322 130 60508	BC857B	7830	4822 209 73423
7650	4822 209 31983	83C528FFB/015	7831	5322 130 60508
7650	4822 209 12554	83C528FFB/024	7850	5322 209 11129
7651	5322 209 11306	HEF4094BT	7851	4822 130 40855
7652	5322 209 11306	HEF4094BT	7870	5322 209 14476
7700	4822 130 41246	BC327-25		
7701	5322 130 60508	BC857B		

22DC710/60../60E../61

22DC710/26

22DC710/64S

For the use of these parts please refer to schematic diagrams

# Service Service Service

Car Systems Service

# Service Information

In above mentioned family of sets, from change code FD08, as from week 542, the following changes has been applied:

1- PWB change index from 2 to 3.

Reason : Components standardization (change from size 1206 and 1210 into 805 and 1206).  
See the new PWB layout on the following page.

2- A 100k resistor (standard component) has been added at pos 3660.

Reason : to suppress noise in cassette mode.

3- Alternative (standard) components have been added, according to the different versions, at positions 3751, 3752, 3753, 3754.

For the values and uses per version, see the schematic diagram.  
Reason: EEPROM compatibility.



**Technician's remarks**

**Service  
Service  
Service**



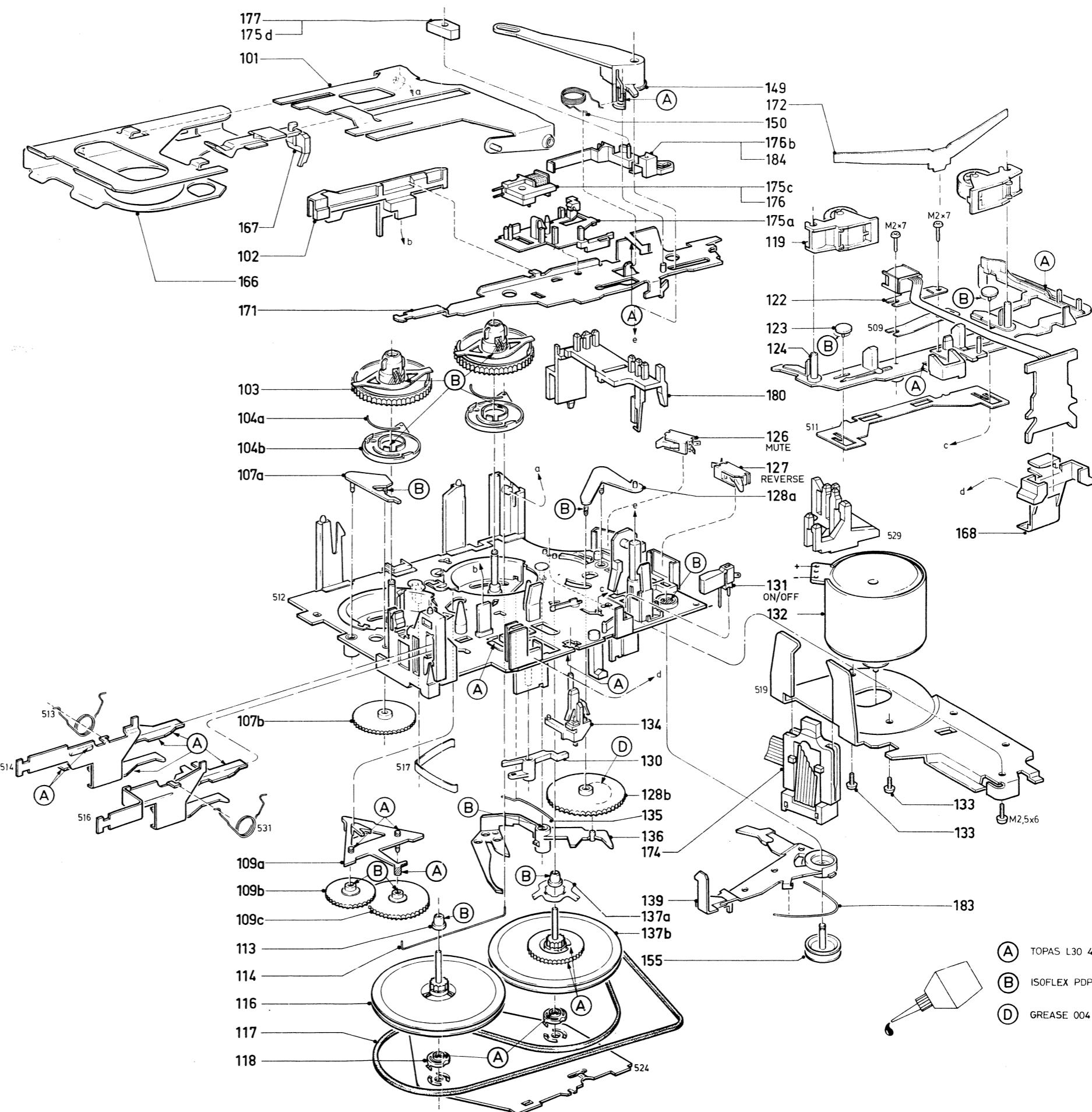
# Service Manual

For this versions, please refer to the Service Manual P6  
version 16 (from week 140) with following exceptions:  
the motor has been mounted at the left side, the playback  
head has been replaced by a Dolby version, MSS  
has been added (only P6-25/3).  
These deviations have been incorporated in the exploded  
view and in the complete list of parts + 11786

A 4822 390 20128  
 B 4822 390 10107  
 D 4822 390 20116  
 101 4822 466 81479  
 102 4822 462 30242  
 103 4822 466 70526  
 104 4822 466 70527  
 107 4822 522 20325  
 109 4822 522 20327  
 113 4822 520 30406  
 114 4822 492 90076  
 116 4822 528 80985  
 117 4822 358 31136  
 118 4822 520 30407  
 119 4822 403 40157  
 122 4822 249 30179  
 123 4822 528 80983  
 124 4822 459 80209  
 126 4822 277 10749  
 127 4822 277 10748  
 128 4822 522 20326  
 131 4822 276 13081  
 130 4822 403 52509  
 132 4822 361 21103  
 133 4822 502 12548  
 134 4822 403 10225  
 135 4822 492 63217  
 136 4822 403 52031  
 137 4822 528 80984  
 139 4822 404 21169  
 149 4822 404 20568  
 150 4822 492 41275  
 155 4822 528 81144  
 166 4822 404 20593  
 167 4822 404 20585  
 168 4822 256 91801  
 171 4822 404 20951 P6-25/2  
 171 4822 404 21174 P6-25/3  
 172 4822 492 63216  
 174 4822 321 61271 P6-25/2  
 174 4822 321 61516 P6-25/3  
 175 4822 404 21173 P6-25/3  
 176 4822 281 50113 P6-25/3  
 177 4822 281 60165 P6-25/3  
 180 4822 256 91799  
 183 4822 492 71064  
 184 4822 404 21232 P6-25/3

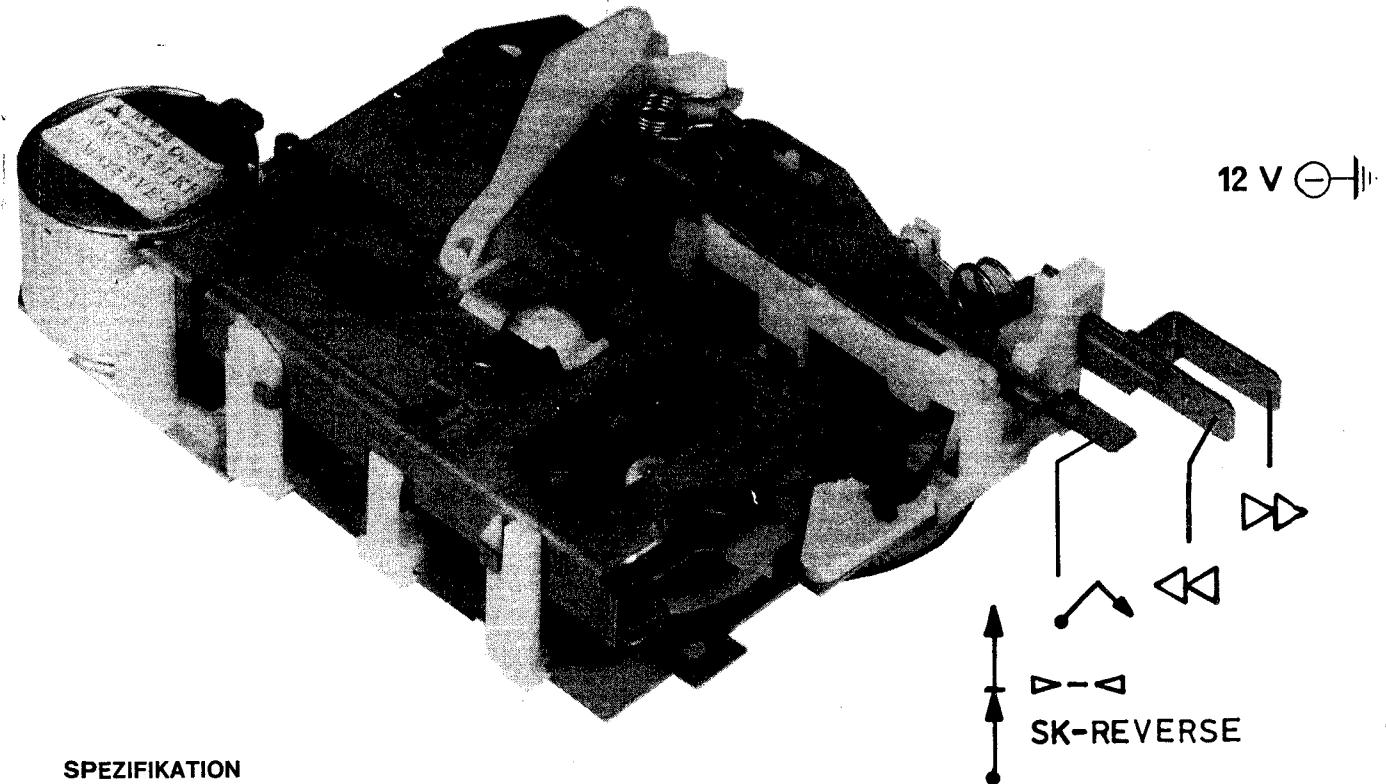
Deck complete: 4822 701 12683 P6-25/2  
4822 701 12684 P6-25/3

**P6-25/2**



Service  
Service  
Service

# Service Manual



## SPEZIFIKATION

Bandgeschwindigkeit	: 4.76 cm/s $\pm$ 2% (10-45°C)
Arbeitsspannung	: 8.4-15 V
Gleichlaufschwankungen	: $\leq$ 0.3% (10-45°C)
Uebersprechen	: $\geq$ 35 dB (1 kHz)
Umspulduer (C60)	: $\leq$ 120 sec.
Spurenzahl	: 2 x 2

36027 A12

Documentation Technique Service Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Servicio  
Subject to modification

D 4822 725 21579

Printed in The Netherlands  
© Copyright reserved

Published by  
Service Consumer Electronics

## LAUFWERKFUNKTION (Bilder 1...5)

In genannten Bildern sind mit Pfeilen die Bewegungen gekennzeichnet, welche die Teile bei einem bestimmten Vorgang ausführen.

In den beigelegten Tabellen ist die Bewegungsfolge festgelegt, wie sie in den Bildern gelesen werden soll. Es wurde folgende Richtlinie zugrundegelegt:

- 1 → 3 : Bewegung zweier verschiedener Teile
- 1 → 2 : Bewegung nur eines Bauteils, das sich mit mehreren Teilen aufbaut und das wegen der Deutlichkeit des Bildes an mehreren Stellen Zeichnerisch dargestellt ist.  
-(etwa die Friktion).

- Bild 1 zeigt die Ausgangsstellung  
Bild 2...5 sind das Ergebnis der in Bild 1 ausgeführten Bewegungen (Cassette ist also eingelegt, das Laufwerk befindet sich in Wiedergabestellung).

## INSTANDHALTUNG

Es empfiehlt sich, das Laufwerk in regelmässigen Zeitabständen zu reinigen und an den wichtigsten Stellen zu schmieren.

### 1. Reinigen mit Alkohol oder Spiritus

- Wiedergabeknopf
- Tonwellen
- Andruckrollen
- Seilrollen

Zum Reinigen von Kopf, Druckrolle und Tonwelle kann auch eine s.g. "drop-in"-Reinigungscassette (SBC114-4822 389 20015) benutzt werden.

### 2. Schmiervorschrift

- Siehe Explosionsansicht 42312E.

## REPARATURHINWEISE

An einigen Stellen sind Bauteile durch Kunststoffnöcken verriegelt.

Zum Ausbau dieser Bauteile müssen die Nöcken verbogen, verdreht usw. werden.

Die Zahnräder 107b, 128b und die Druckrollenbügel 119 sind durch eine Einschnapverbindung an den Achsen befestigt. Mit Hilfe eines Schraubenziehers lassen sich diese Bauteile ausbauen.

Wenn Zahnräad 107b (oder 128b) ausgewechselt wird, ist auch der zugehörige Bügel 107a (oder 128a) auszuwechseln.

Auswechseln der genannten Bauteile siehe Bildern 6...10.

## EINSTELLUNGEN UND KONTROLLEN

### Benötigte Messgeräte

- Universal-Testcassette SBC419 - 4822 397 30069
- Universal-Testcassette SBC420 - 4822 397 30071
- Frikitions-Testcassette 4822 395 30054
- Wechselspannungs-Millivoltmeter
- Federwaage 3-55 p
- Gleichlaufanalysator

### 1. Azimut (Bilder 11 und 12)

- Beide Lautsprecherausgänge mit  $4 \Omega$  belasten.
- An beide Lautsprecherausgänge ein Wechselspannungs-Millivoltmeter schalten.
- Mit Hilfe einer Testcassette SBC419 oder SBC420 das 10-kHz-Signal wiedergeben.
- Schraube A auf den Mittelwert der Höchst-Ausgangsspannungen einstellen.
- Die Differenz zwischen beiden Kanälen darf zuhöchst 4 dB betragen.
- Auf Stellung "reverse" umschalten.
- Falls der gemessene Wert vom bereits gemessenen Wert abweicht das Lager 118 im vorderen Schwungrad ("reverse") verdrehen.

### 2. Friktionen

- Frikitions-Testcassette in das Gerät einlegen. Die Aufwickelfriktion muss für beide Richtungen 55-70 pcm betragen, gemessen nach einer Einlaufdauer von 2 Minuten.
- Der Gegenzug muss für beide Richtungen 4,5-7,5 pcm betragen.
- Bei einem abweichenden Wert muss die entsprechende Aufwickelfriktion oder der entsprechende Gegenzug ausgewechselt werden.
- Die Aufwickelfriktion (SVL) muss 80-130 pcm sein (bei trockenem Wetter: niedriger Wert; bei feuchtem Wetter: hoher Wert). Einem zu hohen Wert ist abzuheften, dadurch dass Blattfeder 137a an den 3 Enden mit einem stumpfen Kunststoffstäbchen ein wenig zusammengedrückt wird.

### 3. Andruckrolle 119

- Kontrolle nach Bild 13.

Der Andruckrollendruck ist nicht einstellbar. Bei einem abweichenden Wert muss Feder 172 ausgewechselt werden.

### 4. Gleichlaufschwankungen/Bandgeschwindigkeit

Es muss mit dem Autoradio komplett kontrolliert werden, und zwar wie folgt.

- Gleichlaufanalysator an die Lautsprecherausgänge schalten
  - Testcassette SBC419 oder SBC420 einlegen und das 3150-Hz-Signal wiedergeben.
  - Der Jaulwert muss  $\leq 0,3\%$  sein.
  - Die Bandgeschwindigkeit muss  $4,76 \text{ cm/s} \pm 2\%$  betragen.
- Die Geschwindigkeit lässt sich mit Schraube B (Bild 11) einstellen.

Bei einem übermässigen Jaulwert müssen folgende Teile auf ihre richtige Arbeitsweise (Einstellung) kontrolliert werden

- Motor 132
- Andruckrolle 119
- Reibkopplungen 103
- Schwungräder 116, 137
- Seil 117
- Lager 113. Beim Auswechseln das neue Lager zuerst kurz "einlaufen" (Schwungrad ein wenig schräg einstecken und einige Umdrehungen schnell rotieren lassen.)
- Scheibe 104. Ist der Wert in der (üblichen) Wiedergabestellung zu hoch, so muss die vordere Scheibe ausgewechselt werden. Bei einem zu hohen Wert in der 'reverse'-Stellung ist die hintere Scheibe auszuwechseln.

### 5. Schwungrad 116,137

- Siehe Bild 14.

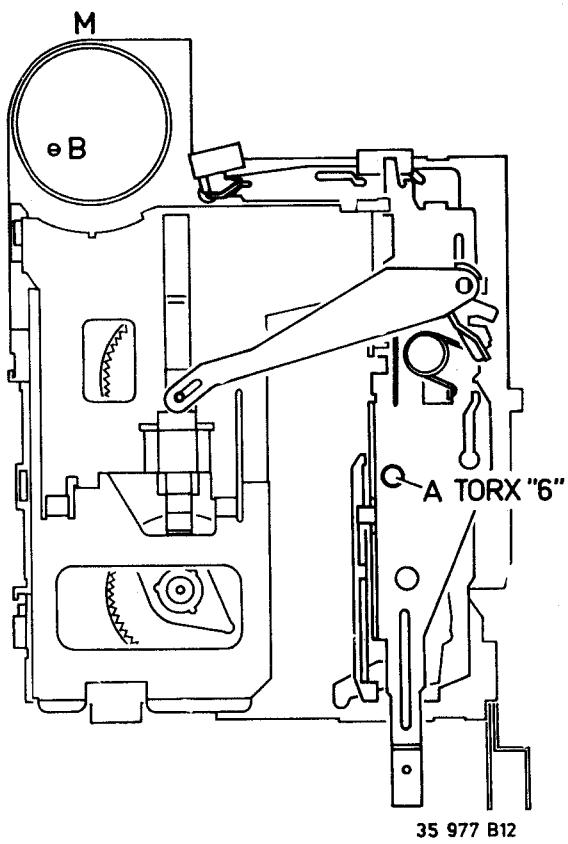


Fig. 11

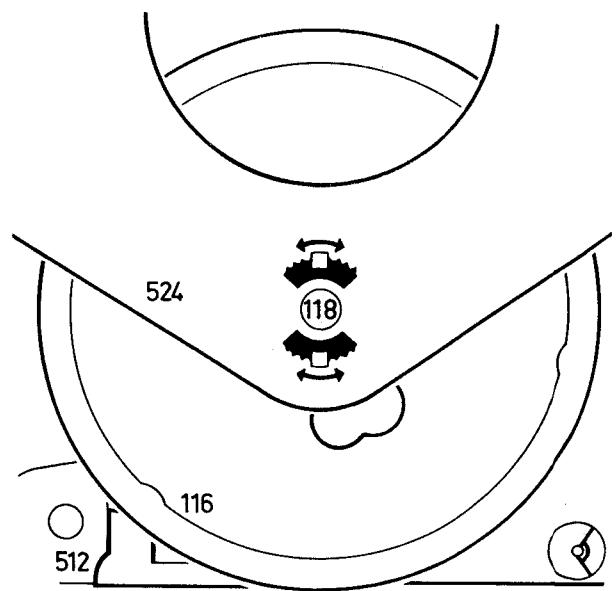
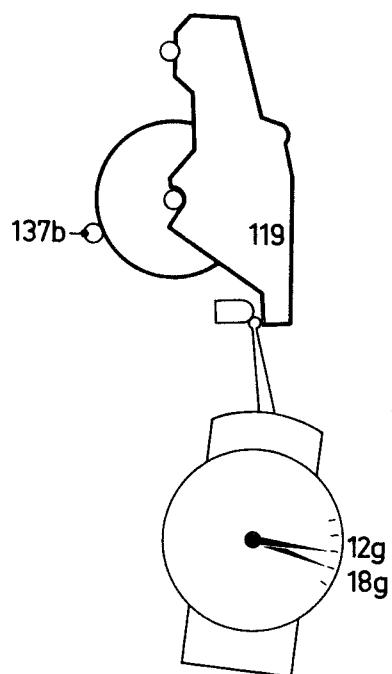


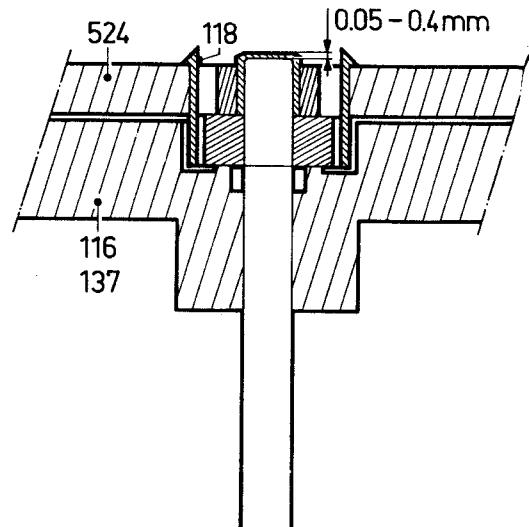
Fig. 12

35 978 A12



35 979 A12

Fig. 13



35 980 A12/3

Fig. 14

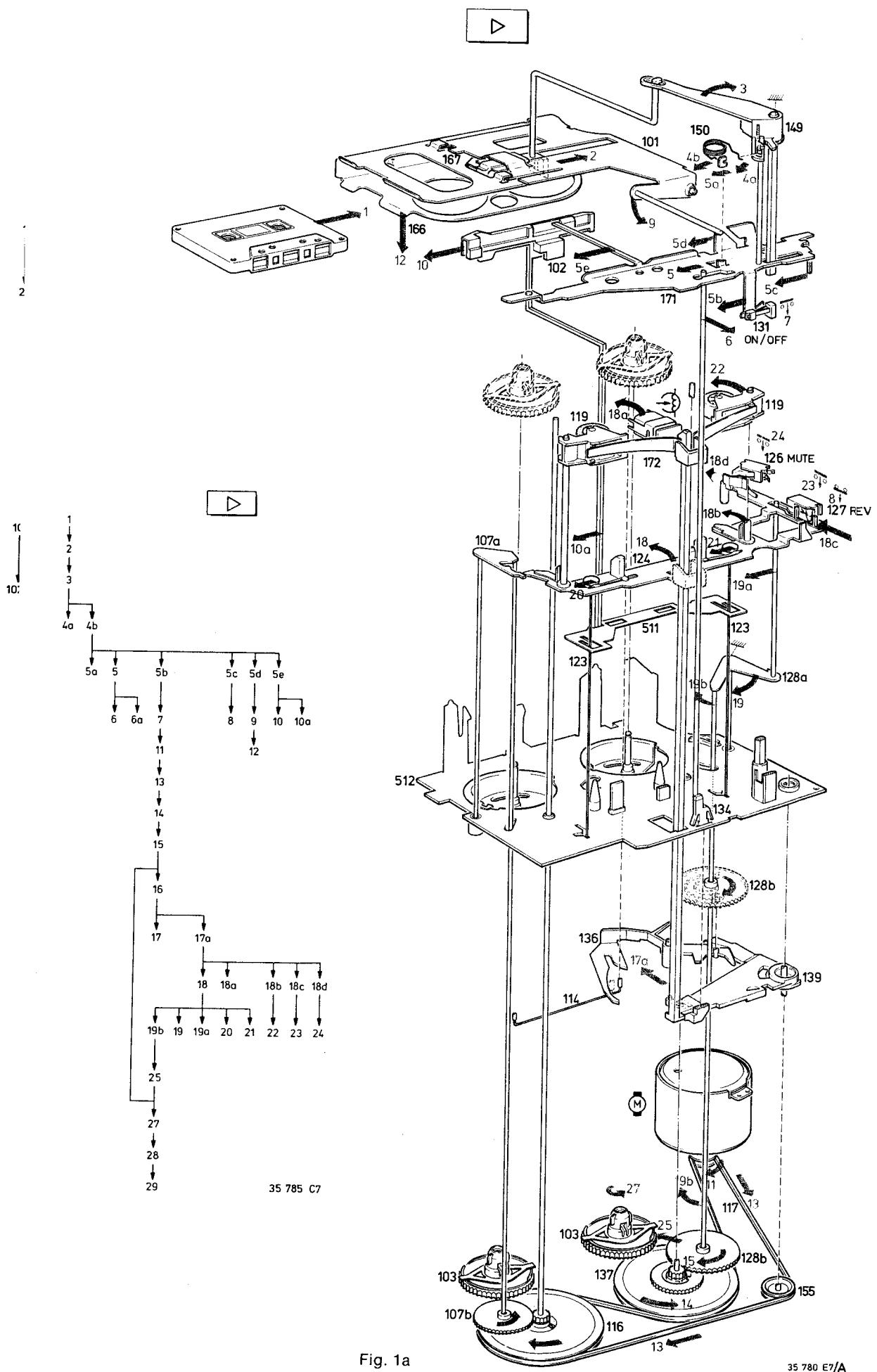


Fig. 1a

35 780 E7/A

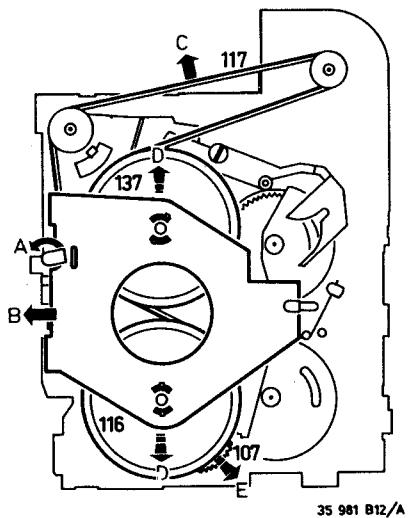
**BELT 117, FLY WHEELS 116, 137, COG WHEEL 107**

Fig. 6

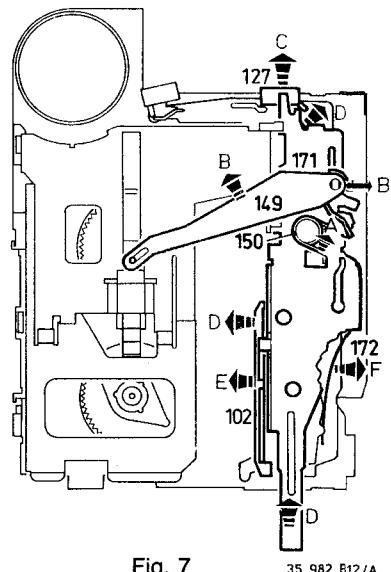
**PRESSURE ROLLER 119, HEAD 122**

Fig. 7

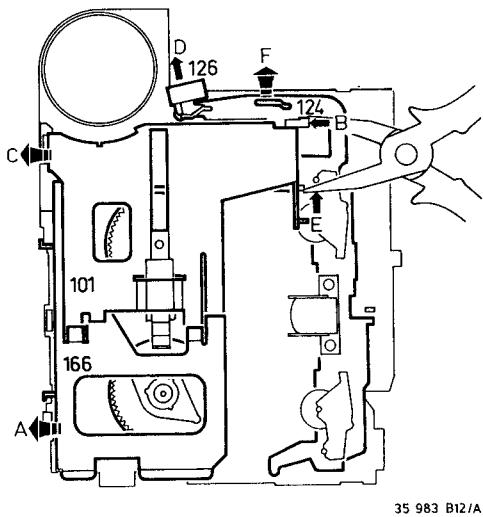
**HEAD BRACKET 124**

Fig. 8

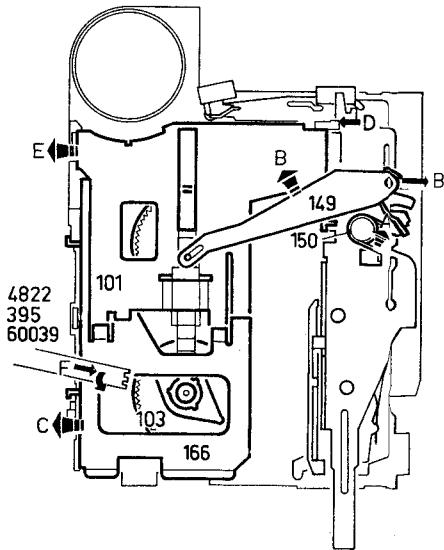
**CLUTCH 103**

Fig. 9

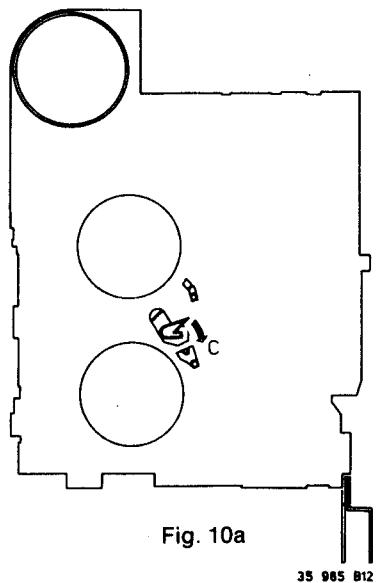
**COG WHEELS 109, 128**

Fig. 10a

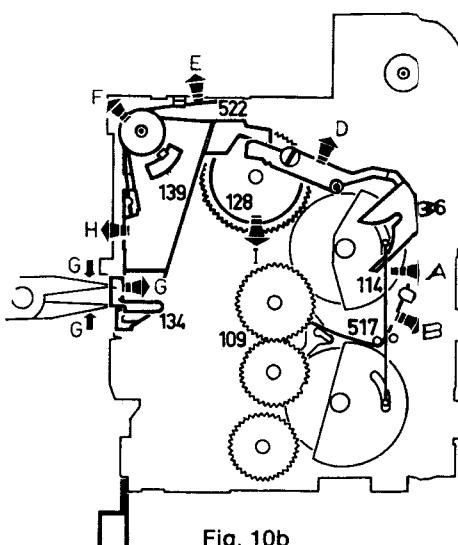
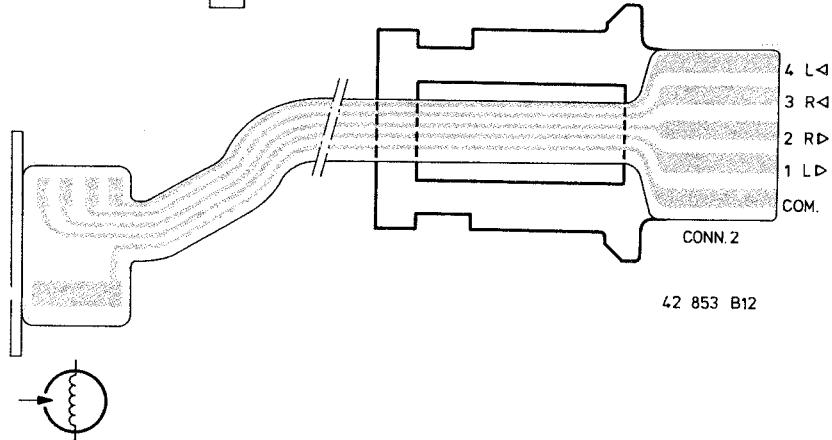
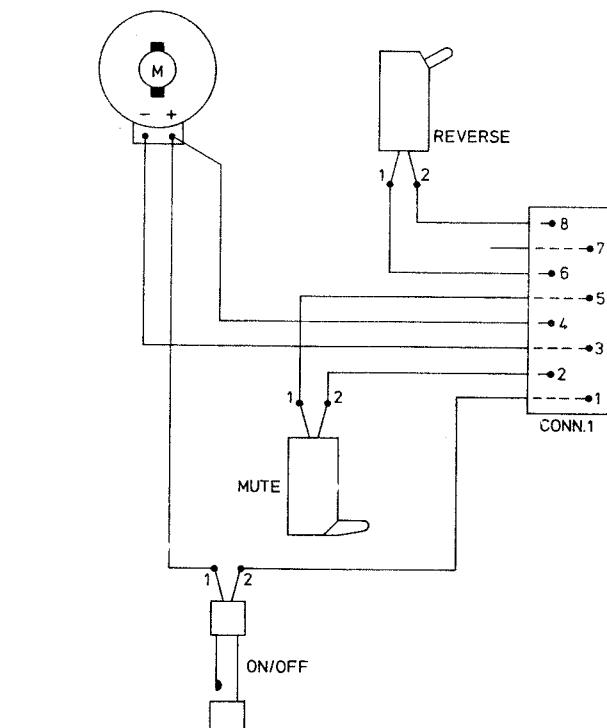
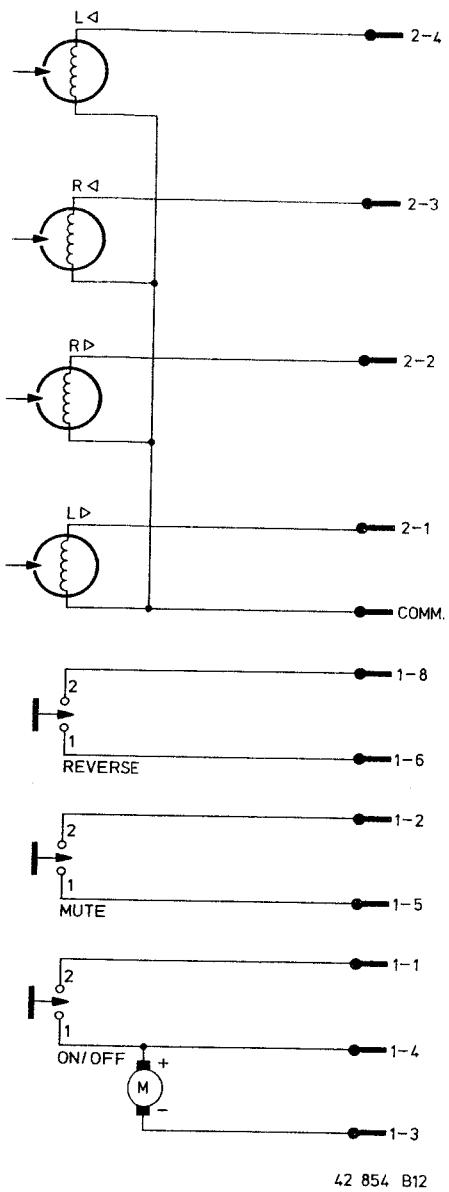
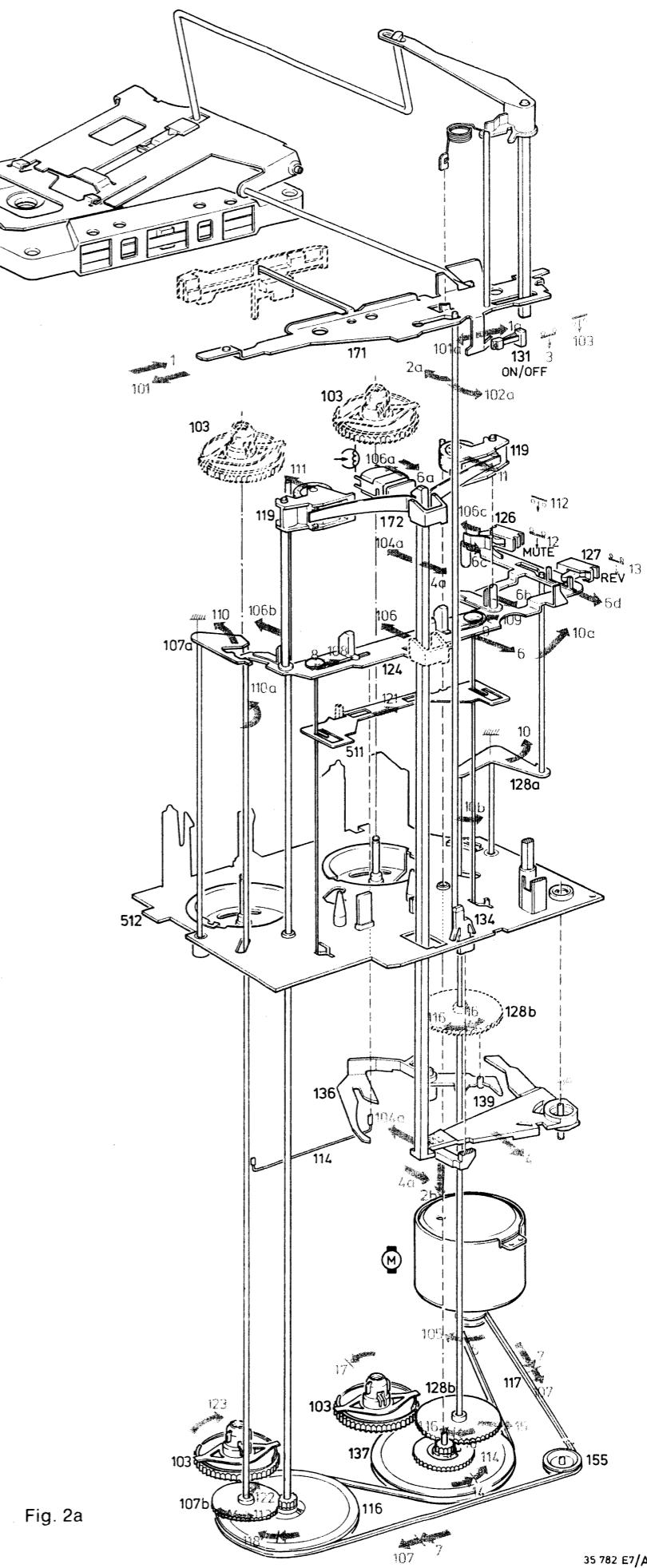
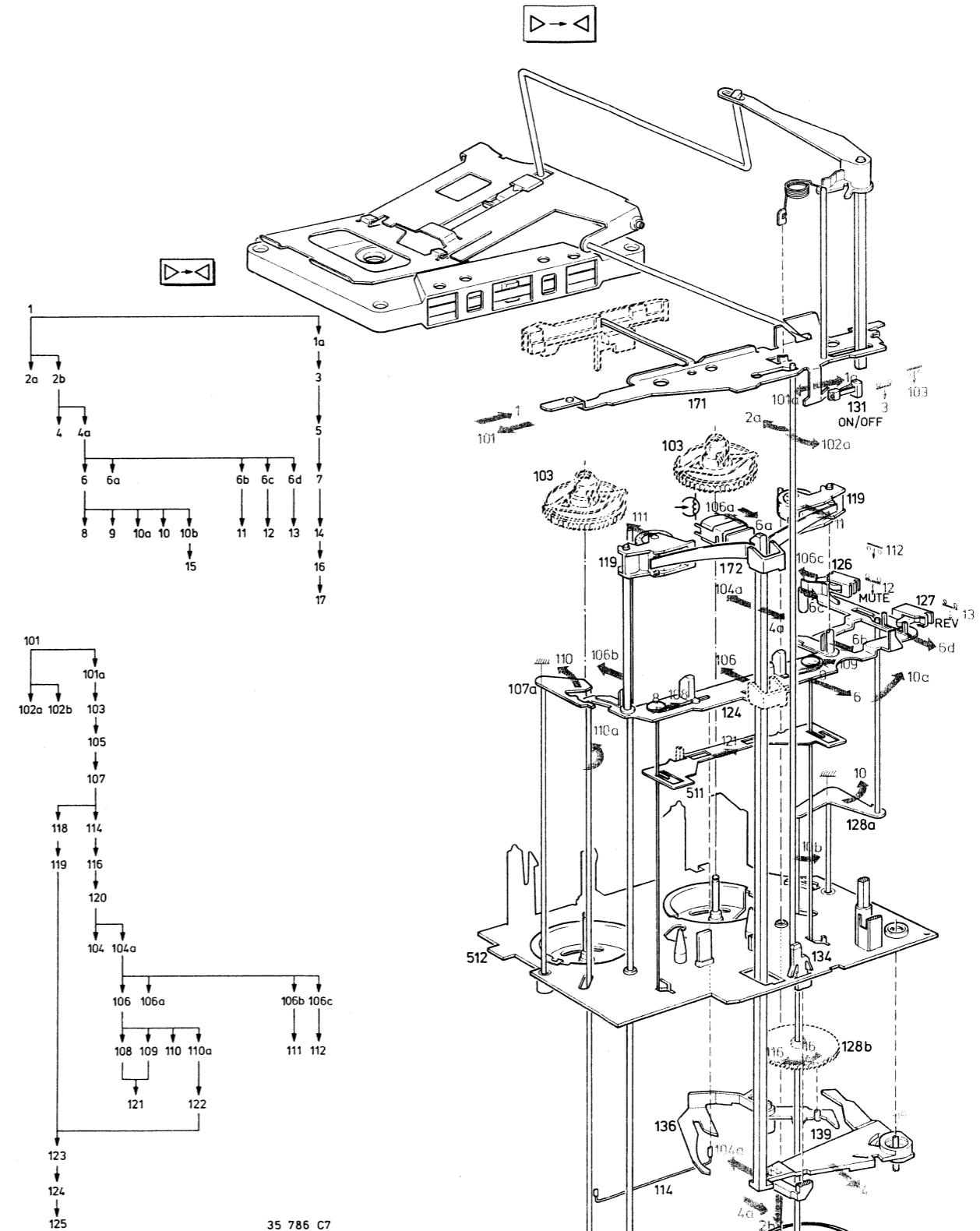
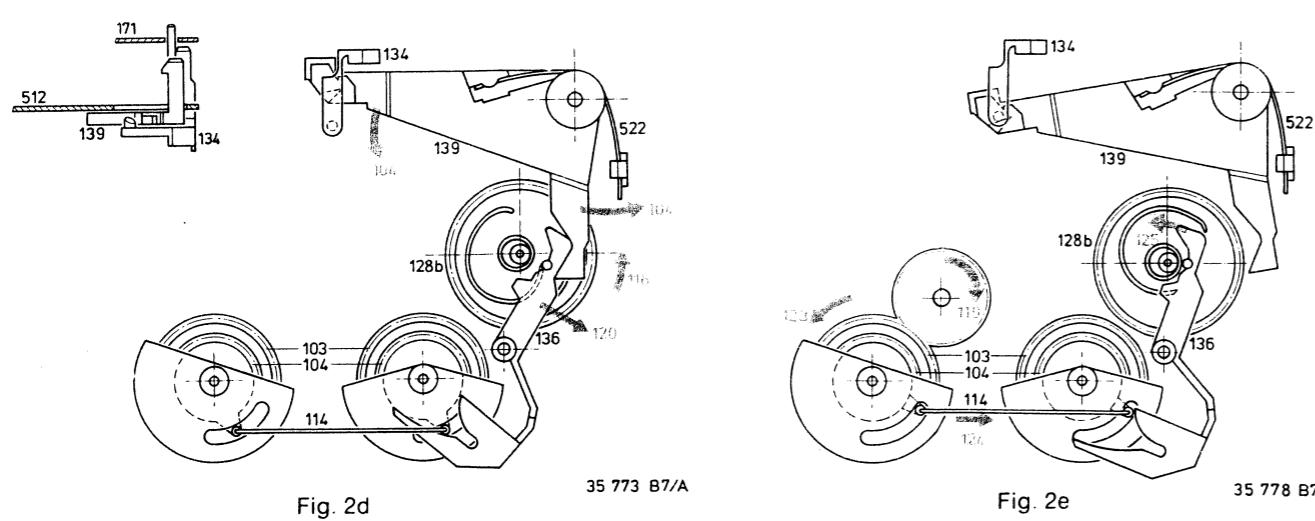
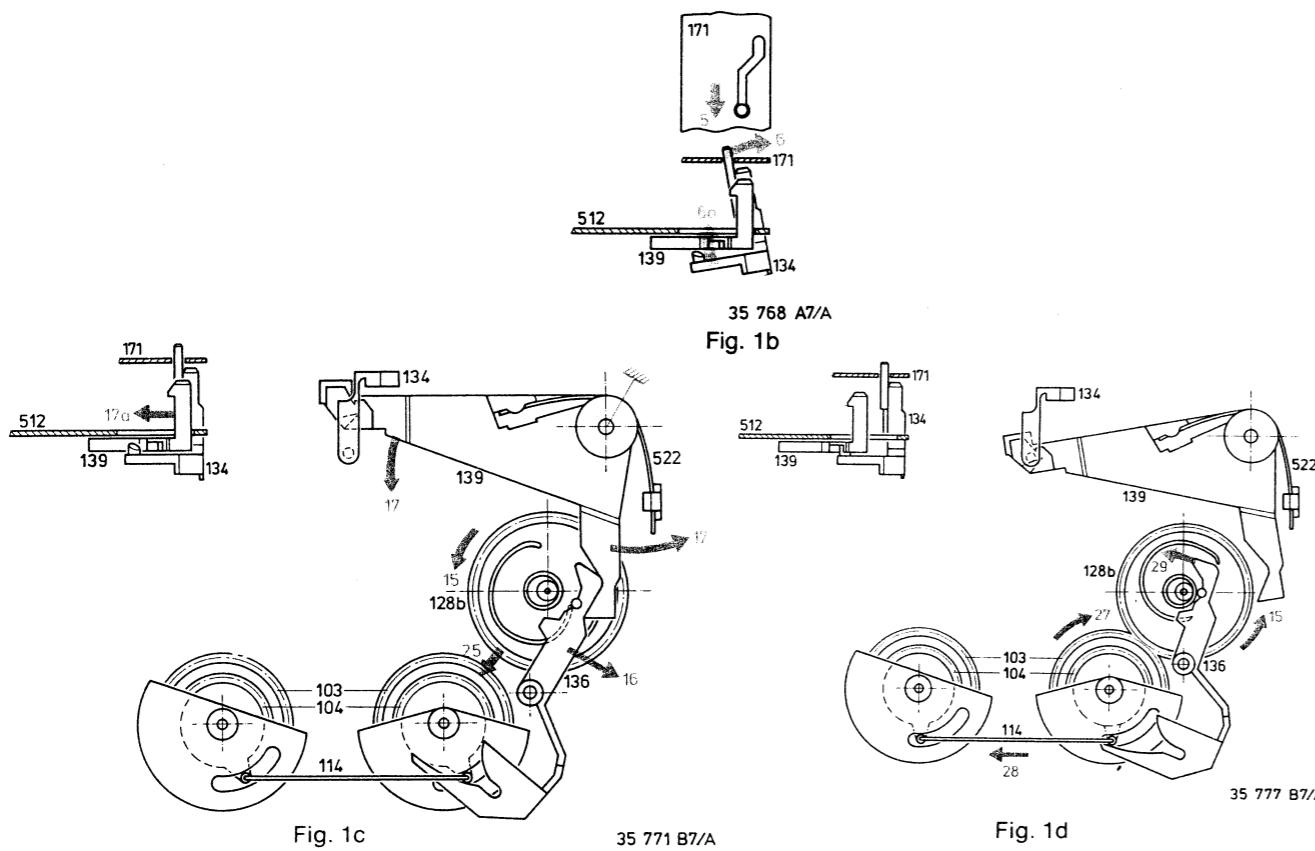
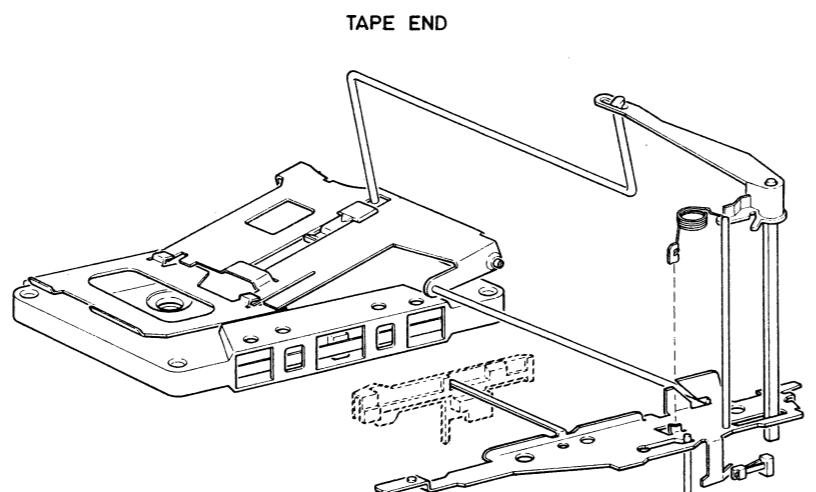


Fig. 10b



42 853 B12





TAPE END

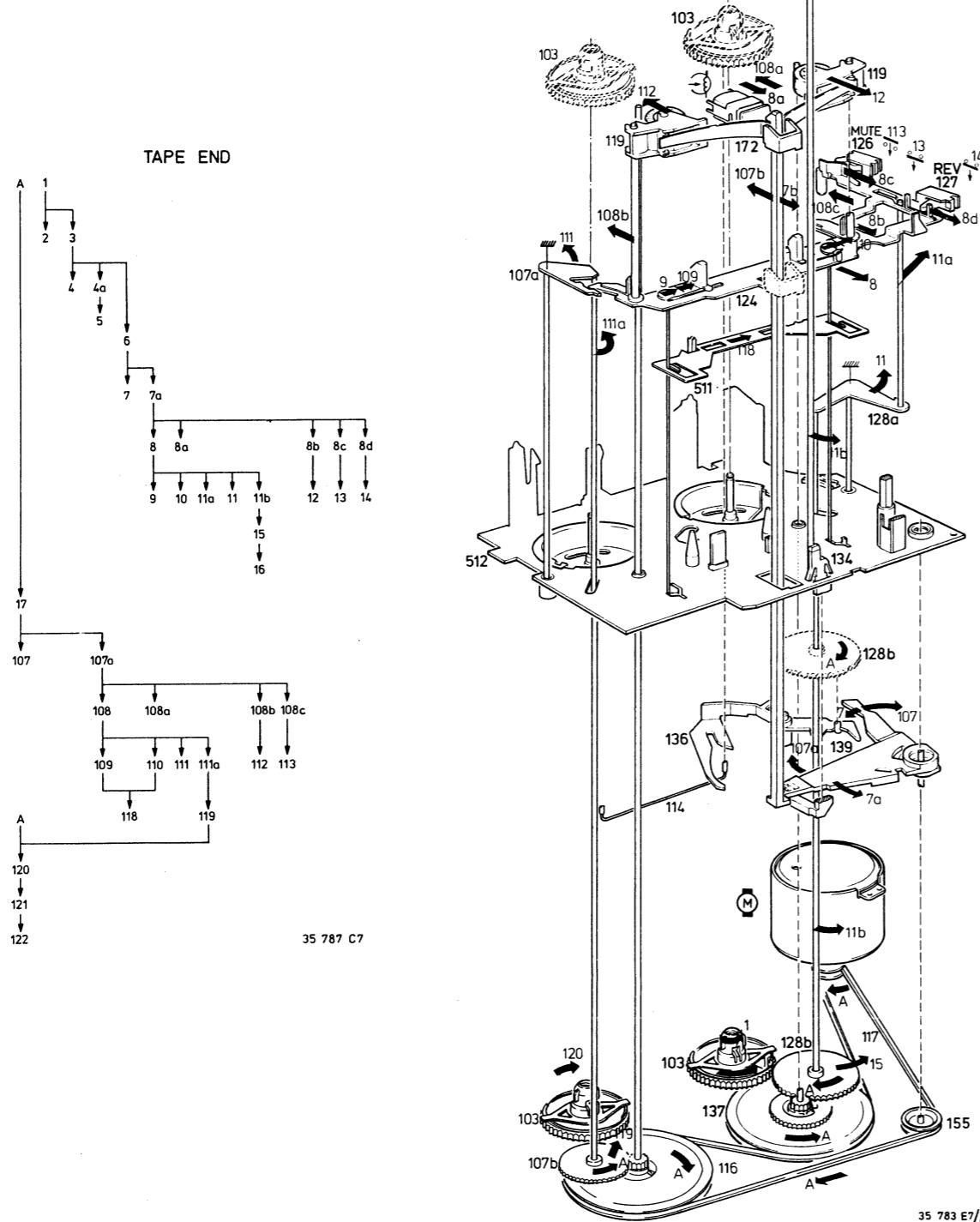


Fig. 3a

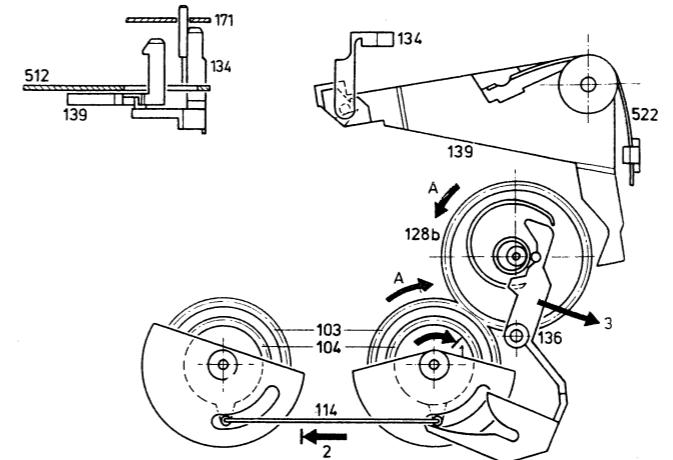


Fig. 3b

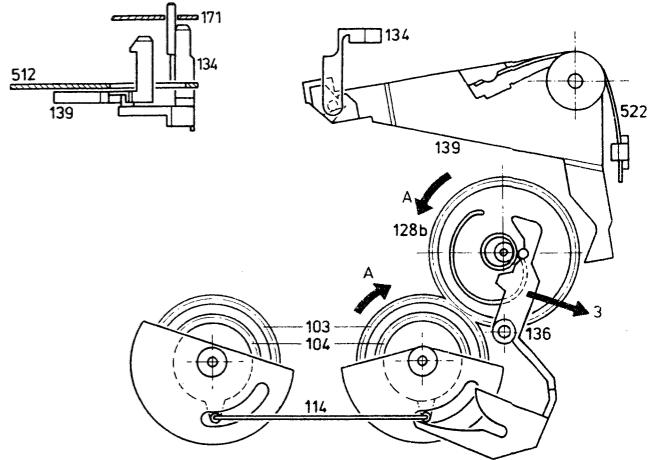


Fig. 3c

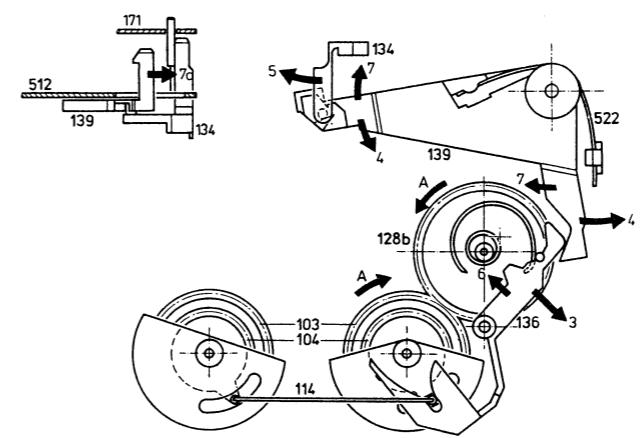


Fig. 3d

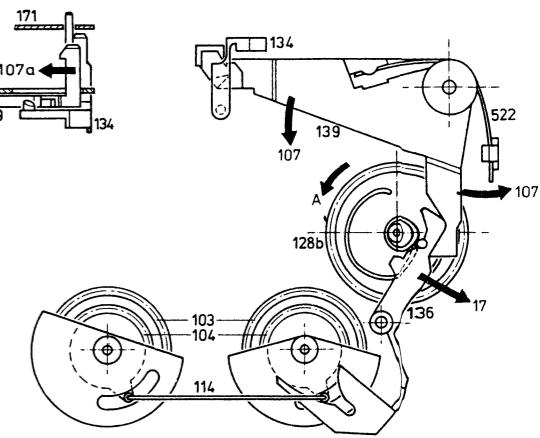


Fig. 3e.

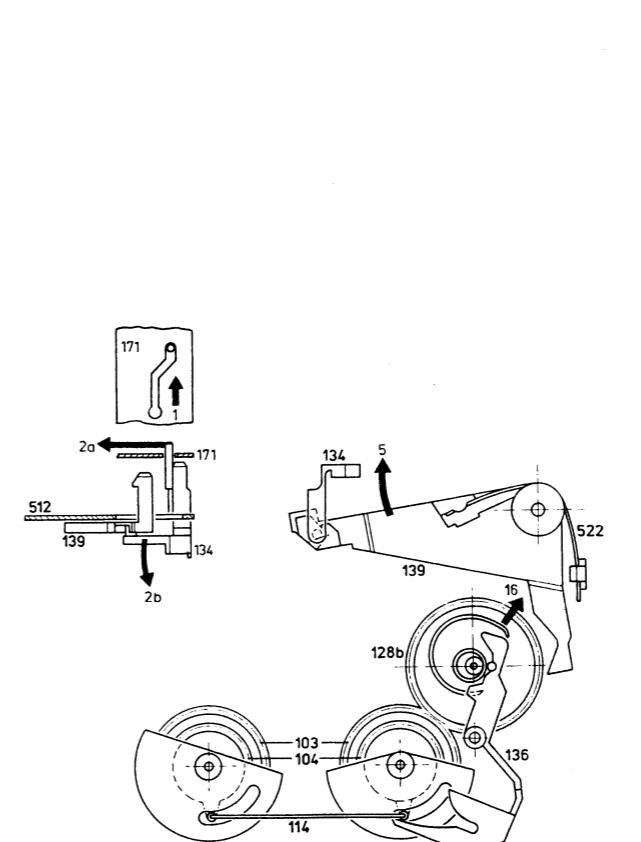


Fig. 4b

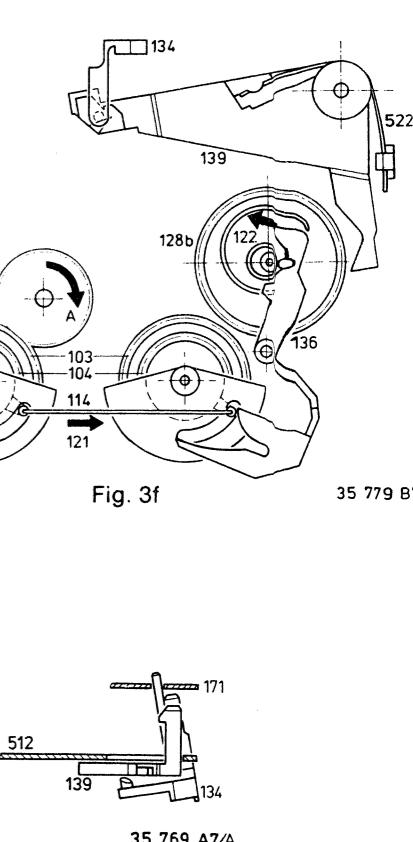


Fig. 4c

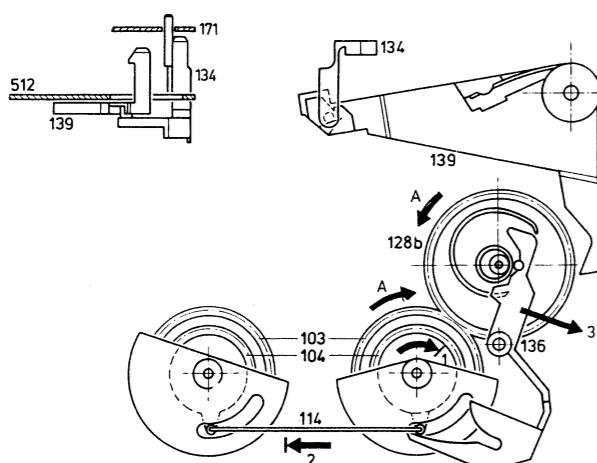


Fig. 3b

35 776 B7/A

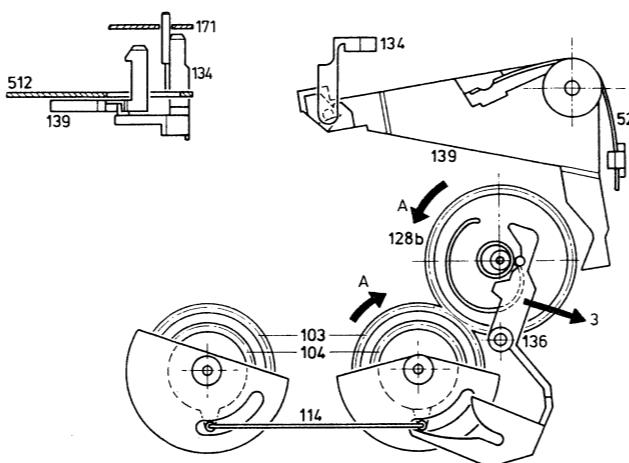


Fig. 3

35 775 B7/A

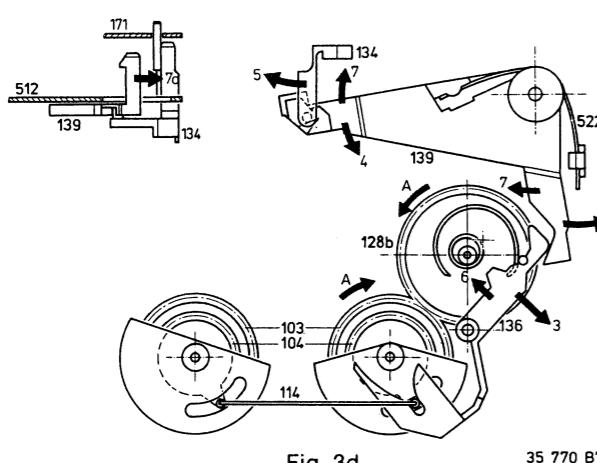


Fig. 3e

35 770 B7/

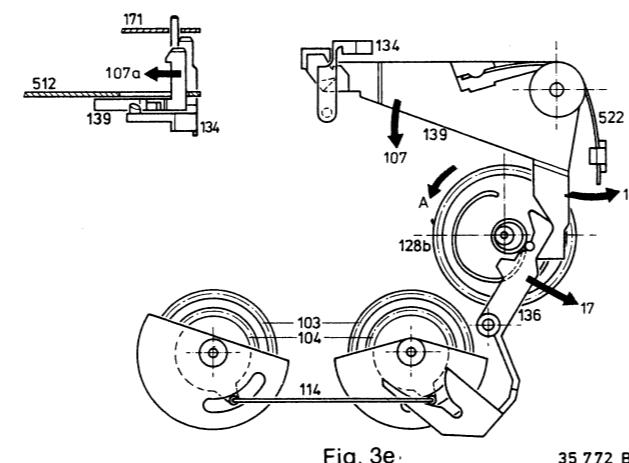


Fig. 3

35 772 B7/A

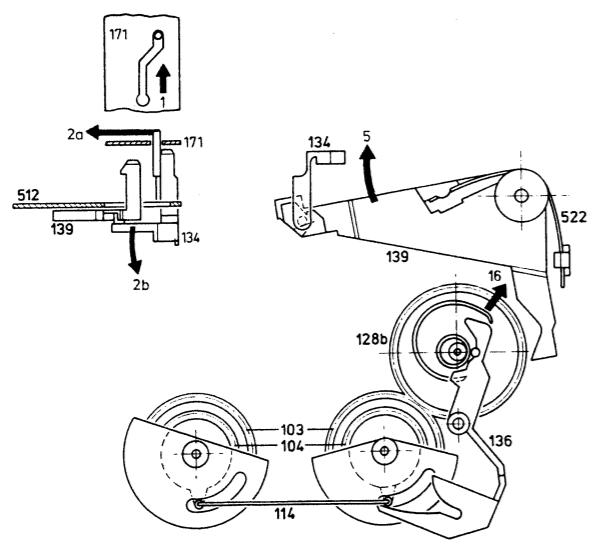


Fig. 4

35 774 B7/B

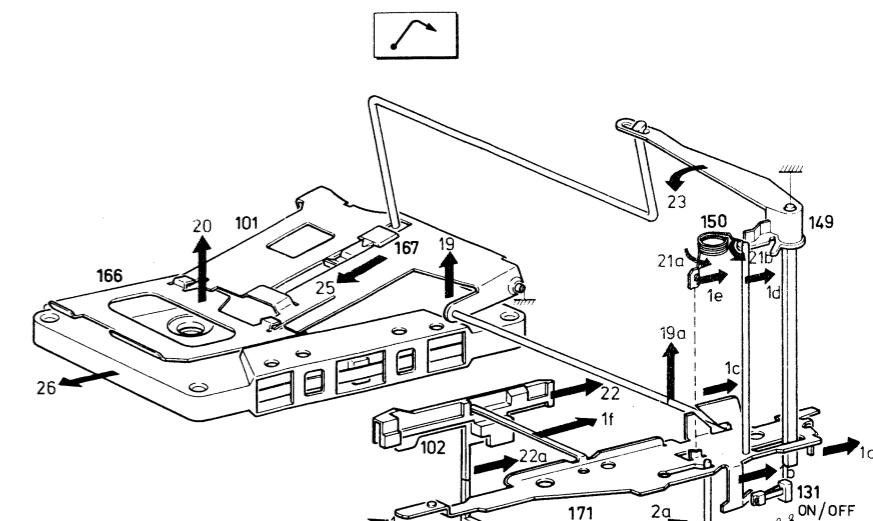
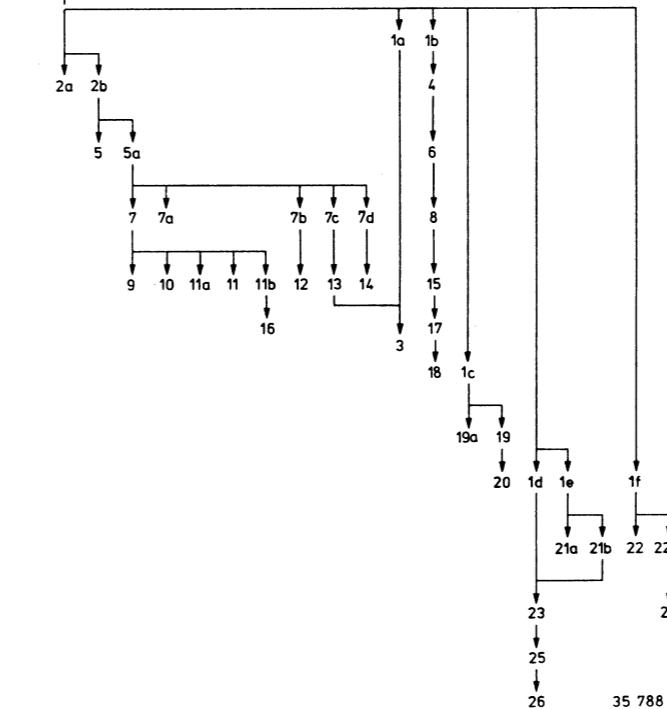
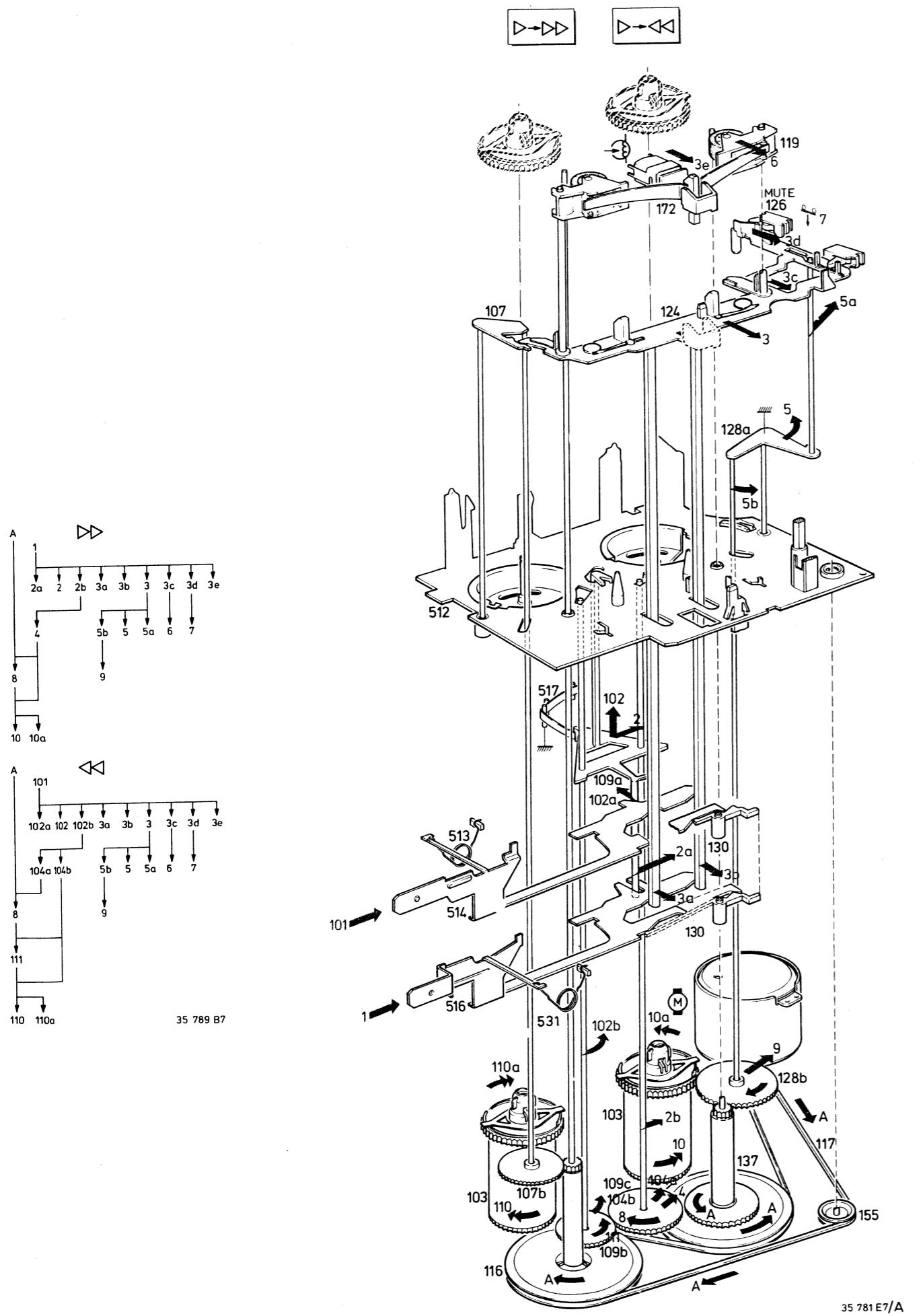
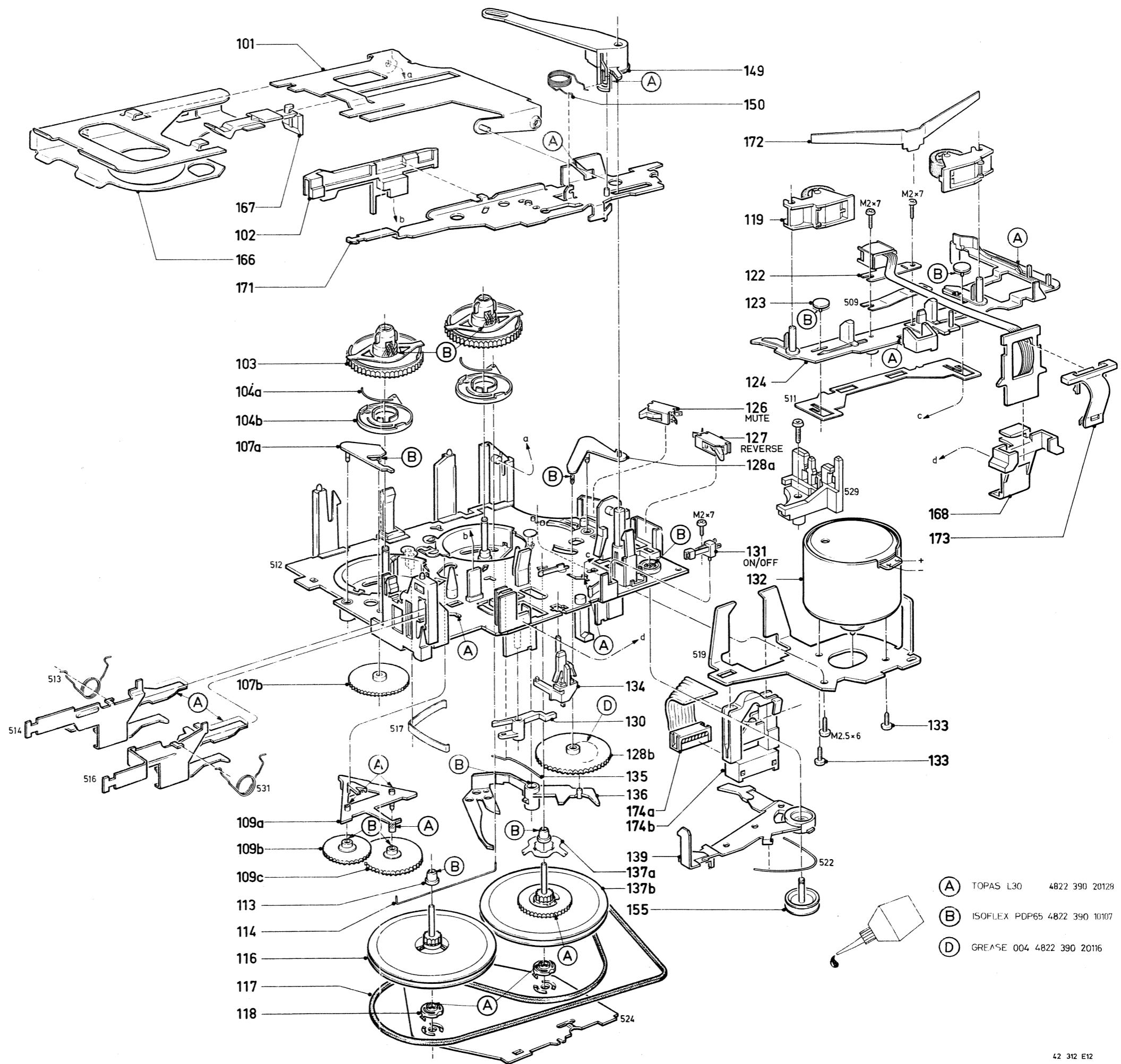


Fig. 4a



A	4822 390 20128
B	4822 390 10107
D	4822 390 20116
101	4822 466 81479
102	4822 462 30242
103	4822 466 70526
104	4822 466 70527
107	4822 522 20325
109	4822 522 20327
113	4822 520 30406
114	4822 492 90076
116	4822 528 80985
117	4822 358 30405
118	4822 520 30407
119	4822 403 40157
122	4822 249 30117
123	4822 528 80983
124	4822 459 80209
126	4822 277 10749
127	4822 277 10748
128	4822 522 20326
130	4822 403 52509
131	4822 276 11291
132	4822 361 20487
133	4822 502 12548
134	4822 403 10225
135	4822 492 63217
136	4822 403 52031
137	4822 528 80984
139	4822 403 52029
149	4822 404 20568
150	4822 492 41275
155	4822 528 81144
166	4822 404 20593
167	4822 404 20585
168	4822 256 91254
171	4822 404 20951
172	4822 492 63216
173	4822 404 20952
174	4822 321 22596



- (A) TOPAS L30 4822 390 20128
- (B) ISOFLEX PDP65 4822 390 10107
- (D) GREASE 004 4822 390 20116